

# TOEFL 真题汇总

阅读分册

@Pal3love 整理

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# 前言，与本书的使用建议

——献给英语基础薄弱、渴望一战破百的你

托福 100+，已经成为了留美申请的基本条件。对于托福的分数要求，尽管大部分北美高校的网站仍挂着一成不变的 80-90 分，但现实却是，大量托福 100+ 的中国、印度申请者已经人为将这条线顶了上去。实际上，从 2005 年新托福改革到现在的整整十年间，北美申请的难度一直在逐年增大。也许十年前，90 分的托福是一个相当了不起的分数，完全可以拿来申请大部分名校，但到了现在，90 分只会让申请者在提交申请时承受极大的心理压力。将托福刷到破百，成为了众考生挥之不去的一场噩梦。

新托福考试（TOEFL iBT）采用完全机考的形式进行，考生需要在 4 个小时内连续进行阅读、听力、口语和写作测试，加之试题的大题量与高难度，这仿佛就像一场艰难的车轮战，使无数胸怀大志、悠然自得的考生在那个带着耳麦的黑人叔叔面前化为了炮灰。

总而言之，托福对我们的英语能力提出了非常高的要求。高到什么程度呢？虽然不太科学，但不妨拿我们熟悉的四六级来类比。我在大一两个学期内连续裸考通过英语四六级，六级恰好过线。我们专业的英语水平普遍较低，当时我是全年级唯一一个大一考过六级的考生，这使我不由得沾沾自喜。与很多轻敌的同学一样，我抱着很轻松的心态在大二报考了托福。看了一些论坛里的「100+ 考试心得」，我很天真地以为托福 100+ 就像过六级一样简单，于是我没有做任何准备，在两个月之后挺身裸考。

果然，我被托福狠狠甩了一巴掌。

考试当天，我没能做完听说读写中任何一部分题目。阅读几乎一句话也看不懂，听力大脑一片空白，口语没有说出一个完整的句子，独立写作甚至没有写到 150 字。两周之后，成绩出来了。我没查，我没有查成绩的勇气。

我终于领教到了托福的厉害。从那以后，我再也不敢沾沾自喜，开始扎扎实实重新学英语。托福先考阅读，那我就从阅读开始练。**第一步总是最难的**。一开始，接踵而来的长句子使我晕头转向，一片片生词让我唉声叹气；考试要求 20 分钟内做完一篇文章，而我读一篇却要花一个小时，答题还错误连篇。在巨大的挫折中，我不得不**接受自己英语水平很差的现实**，从零做起。看不懂单词，就背红宝书；读不懂句子，就分析结构、学习语法；如果一遍读不懂，那就来第二遍、第三遍，**直到彻底理解为止**。可喜的是，在这个艰难的过程中，我逐渐**找到了适合自己的训练方法，并制定出计划**，每天有条不紊地训练。功夫不负有心人，仅仅在一个月之后，我的阅读就猛增到了 29 分，并在随后提到 30。至此，托福阅读这道坎在一个月内被奇迹般地攻破。

与四六级等国内的英语考试不同，托福的第一部分测试是阅读。由于托福采用先来后到的考试流程，每人开始考试的时间不尽相同，所以会常常出现你一边做阅读、其他考生一边入场的情况；加之没有听力迫使考生集中注意力，很多人都会感觉做阅读时常常分心、精神涣散。因此，我们更需要在平时训练出扎实的阅读能力，抵抗考试中出现的不利局面。

众所周知，最佳的托福备考资料为美国教育考试中心（ETS）推出的托福真题集（TOEFL Practice Online，简称 TPO）。TPO 由托福题库中被抽出的旧题组成，与真实考题的思路、难度、风格完全一致。到现在为止，ETS 已经发布了数十套 TPO，题量非常充足。作为考生，我们只需要将这些真题做透，就完全可以达到托福考试的要求。

目前，网络上流传的 TPO 主要有软件版和纸质版两种。软件版 TPO 在最大程度上模拟了真实考试，是考前模考、适应考场环境的最佳选择。不过，软件毕竟需要电脑作为载体，对我而言，抱着电脑到处占座是件很麻烦的事；此外，作为从小读纸书到大的中国学生，我更喜欢在纸上阅读的感觉，所以纸质版 TPO 是我平时刷题的不二之选。令人遗憾的是，纸质版 TPO 似乎很少有人整理，排版非常混乱，题目东拼西凑，病句和错误答案不时出现，给当时的我带来了不少烦恼。所以在申请季结束之后，我决定将 TPO 纸质版重新整理一遍，并结合自身的经历，尽我所能做到最出色，以飨战友。这就是本书诞生的缘由。

作为重新整理的纸质版 TPO，本书有如下特点：

1. 将迄今为止所有的托福真题一网打尽，全面收录 ETS 官网样题 5 篇、官方指南（OG）练习题 3 套、TPO 36 套，做到真正的托福阅读一本全；
2. 重新校对阅读短文以及题目，尽量减少低级错误；
3. 重新构思排版，精选最易阅读的中西文字体，谨慎安排版面分布，以求最流畅的纸质刷题体验；
4. 重新整理参考答案和解析，并将其安排在适当位置，最大程度方便读者查阅；
5. 结合个人训练经验，加入「笔记区」「自我评价」和「复习自查表格」，督促读者培养良好的训练习惯；
6. 不收录阅读经典加试机经。

接下来我从自己的经验出发，总结一下我对本书的使用建议，读者可以参考。

1. 虽然我认为大学英语四六级十分陈腐而且不够科学，但它仍然可以粗略估计我们的英语水平。六级裸考考不到 520 分，英语基础其实都很薄弱。如果你的英语基础不好，请务必接受英语不好的现实，不要试图找任何借口自我安慰。**英语不好就得练，欠下的债就得还。**
2. 如果还没有背单词，那么务必先背单词，否则做题寸步难行。不妨搜索《21 天搞定 GRE 单词》，参照杨鹏老师的方法制订**自己能承受**的计划，并将**理想的单日任务量 × 64%**。我们都有高估自己的毛病，经过削减的任务量才是普通人能够坚持下来的实际任务量。以个人经验来看，**如果同时参加托福和 GRE 考试，直接背 GRE 单词最节约时间，剩下的生词可以在刷题中积累。**
3. 单词背到八成熟，请立刻开始训练，不要拖延，养成**迅速开始、缓慢结束**的习惯。第一步总是最艰难的。也许很多人都会像我一样，读前几篇文章读得焦头烂额，每篇花一个小时也读不完。这很正常，一切都会慢慢进入正轨，但你必须赶紧行动，**赶紧行动。**
4. **只刷题却不总结、不复习，没有任何意义。训练的核心不是刷题，而是总结和复习。**
5. 在训练初期，一次完成一篇文章即可；在形成自己的训练方法之后，就要逐渐加大剂量，一次连做两篇乃至三篇，向正式考试的题量靠近。
6. 做题时，**除了时间要求**，请按照正式考试的要求，**不准查单词、不准走神碰手机，遇到生词努力猜读，一次性把题做完。**有人喜欢读完文章再做题，也有人喜欢边读边做，请找出最适合你的阅读习惯。随手将生词圈出来备用。
7. **做题时不要倒计时、而要正计时。不要强迫自己在 20 分钟之内做完，这没有意义。**倒计时只会让你在慌张之中马马虎虎读完，**不懂的地方还是不懂**，对提升能力一点帮助也没有。反之，**在读懂的前提下**，尽你所能最快读完才是最有效的训练方法。正计时可以督促我们产生紧张感，集中注意力，但不会使我们过度慌张。
8. 本书的每篇文章都设有「自我评价」。做完题之后，请核对答案，将错题、（正计时）用时和你的主观

难度评估写在「自我评价」里。问问自己：我读懂了吗？**如果读得似懂非懂，请标记「难」。**

9. 现在应该查单词了。将第 6 步圈出来的生词列在「笔记区」中，查好释义，过几遍，记住它们。

10. 对于标记为「难」的文章，查完单词之后请读第二遍。这次不用计时，读透文章的每一句话。遇到不懂的句子，就分析语法结构；如果实在分析不出来或遇到不懂的语法，不妨百度一下或者问老师，直到弄懂为止。**请注意，这里就是你最薄弱的地方，这一步是训练中最关键的一步，千万不能逃避和懈怠，搞不明白的句子必须彻底读懂。**

11. **经常翻看笔记，复习生词和语法，通过不断重复，彻底攻克你的障碍。**

**基础差并没有关系，只要严格要求自己，将本书完成 2/3，大多数人的托福阅读都可以达到 25 分；坚持做完本书并复习数次，阅读一定可以稳拿满分。与此同时，你的英语阅读水平必将突飞猛进。**

也许你第一次接触托福就倍受打击，也许你已鏖战数次却不得方法，但请按捺这份焦躁不安的心情，托福是北美留学之路的第一关。没有人生来是英语天才，每一位高分拿下托福、GRE、GMAT 的大神都曾付出无数汗水与泪水。遭遇挫折并不可怕，请让自己冷静下来，开动脑筋多思考、多尝试、多总结，找出属于自己的方法，并加以持之以恒的努力，那么胜利必将属于你。

请记住：在每年的留美申请大军中，只有 10% 坚持到了最后。

**「自己选择的路，跪着走，也要走完。」**

愿本书能够在你远渡重洋的路上，助你一臂之力！

@Pal3love

于天津科技大学

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附：常见北美留学网站一览

一亩三分地：<http://www.1point3acres.com/bbs/>

尚友论坛：<http://www.sharewithu.com/bbs.php>

ChaseDream 论坛：<http://forum.chasedream.com/>

太傻超级论坛：<http://bbs.taisha.org/>

朗播网：<http://www.langlib.com/>

寄托天下：<http://bbs.gter.net/>

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*Practice makes perfect.*



## TOEFL Official Guide Sample Questions

这是 ETS 提供的一篇例文。

开始训练之前，先来看看托福阅读的题型以及出题风格吧！

### Applied Arts and Fine Arts

Although we now tend to refer to the various crafts according to the materials used to construct them—clay, glass, wood, fiber, and metal—it was once common to think of crafts in terms of function, which led to their being known as the “applied arts”. Approaching crafts from the point of view of function, we can divide them into simple categories: containers, shelters and supports. There is no way around the fact that containers, shelters, and supports must be functional. The applied arts are thus bound by the laws of physics, which pertain to both the materials used in their making and the substances and things to be contained, supported, and sheltered. These laws are universal in their application, regardless of cultural beliefs, geography, or climate. If a pot has no bottom or has large openings in its sides, it could hardly be considered a container in any traditional sense. **Since the laws of physics, not some arbitrary decision, have determined the general form of applied-art objects, they follow basic patterns, so much so that functional forms can vary only within certain limits.** Buildings without roofs, for example, are unusual because they depart from the norm. However, not all functional objects are exactly alike; that is why we recognize a Shang Dynasty vase as being different from an Inca vase. What varies is not the basic form but the incidental details that do not obstruct the object’s primary function.

Sensitivity to physical laws is thus an important consideration for the maker of applied-art objects. It is often taken for granted that this is also true for the maker of fine-art objects. This assumption misses a significant difference between the two disciplines. Fine-art objects are not constrained by the laws of physics in the same way that applied-art objects are. Because their primary purpose is not functional, they are only limited in terms of the materials used to make them. Sculptures must, for example, be stable, which requires an understanding of the properties of mass, weight distribution, and stress. Paintings must have rigid stretchers so that the canvas will be taut, and the paint must not deteriorate, crack, or discolor. These are problems that must be overcome by the artist because they tend to intrude upon his or her conception of the work. For example, in the early Italian Renaissance, **bronze statues of horses** with a raised foreleg usually had a cannonball under that hoof. This was done because the cannonball was needed to support the weight of the leg. In other words, the demands of the laws of physics, not the sculptor’s aesthetic intentions, placed the ball there. That this device was a necessary structural compromise is clear from the fact that the cannonball quickly disappeared when sculptors learned how to strengthen the internal structure of a statue with iron braces (iron being much stronger than bronze).

Even though the fine arts in the twentieth century often treat materials in new ways, the basic difference in attitude of artists in relation to their materials in the fine arts and the applied arts remains relatively constant. It would therefore not be too great an exaggeration to say that practitioners of the fine arts work to overcome the limitations of their materials, whereas those engaged in the applied arts work in concert with their materials.

**1. The word “they” in the passage refers to**

- (A) applied-art objects
- (B) the laws of physics
- (C) containers
- (D) the sides of pots

**2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.**

- (A) Functional applied-art objects cannot vary much from the basic patterns determined by the laws of physics.
- (B) The function of applied-art objects is determined by basic patterns in the laws of physics.
- (C) Since functional applied-art objects vary only within certain limits, arbitrary decisions cannot have determined their general form.

- (D) The general form of applied-art objects is limited by some arbitrary decision that is not determined by the laws of physics.

**3. According to paragraph 2, sculptors in the Italian Renaissance stopped using cannonballs in bronze statues of horses because**

- (A) They began using a material that made the statues weigh less  
 (B) They found a way to strengthen the statues internally  
 (C) The aesthetic tastes of the public had changed over time  
 (D) The cannonballs added too much weight to the statues

**4. Why does the author discuss the bronze statues of horses created by artists in the early Italian Renaissance?**

- (A) To provide an example of a problem related to the laws of physics that a fine artist must overcome  
 (B) To argue that fine artists are unconcerned with the laws of physics  
 (C) To contrast the relative sophistication of modern artists in solving problems related to the laws of physics  
 (D) To note an exceptional piece of art constructed without the aid of technology

**5. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

This passage discusses fundamental differences between applied-art objects and fine-art objects.

**Answer choices**

- (A) Applied-art objects fulfill functions, such as containing or sheltering, and objects with the same function have similar characteristics because they are constrained by their purpose.  
 (B) It is easy to recognize that Shang Dynasty vases are different from Inca vases.  
 (C) Fine-art objects are not functional, so they are limited only by the properties of the materials used.  
 (D) Renaissance sculptors learned to use iron braces to strengthen the internal structures of bronze statues.  
 (E) In the twentieth century, fine artists and applied artists became more similar to one another in their attitudes toward their materials.  
 (F) In all periods, fine artists tend to challenge the physical limitations of their materials while applied artists tend to cooperate with the physical properties of their materials.

**6. Directions: Complete the table below to summarize information about the two types of art discussed in the passage. Match the appropriate statements to the types of art with which they are associated. This question is worth 3 points.**

The Applied Arts (THREE):
---------------------------

The Fine Arts (TWO):
----------------------

**Answer choices**

- (A) An object's purpose is primarily aesthetic.  
 (B) Objects serve a functional purpose.  
 (C) The incidental details of objects do not vary.  
 (D) Artists work to overcome the limitations of their materials.  
 (E) The basic form of objects varies little across cultures.  
 (F) Artists work in concert with their materials.  
 (G) An object's place of origin is difficult to determine.

**参考答案与解析 (摘自 Official Guide)**

1. **A.** This is an example of a simple pronoun-referent item. The highlighted word *they* refers to the phrase “applied-art objects,” which immediately precedes it, so choice A is the correct answer. Often the grammatical referent for a pronoun will be separated from the pronoun. It may be located in a preceding clause or even in the preceding sentence.
2. **A.** It is important to note that the question says that incorrect answers change the original meaning of the sentence or leave out essential information. In this example, choice D changes the meaning of the sentence to its opposite; it says that the form of functional objects is arbitrary, when the highlighted sentence says that the forms of functional objects are never arbitrary. Choice B also changes the meaning. It says that the functions of applied-art objects are determined by physical laws. The highlighted sentence says that the form of the object is determined by physical laws but the function is determined by people. Choice C leaves out an important idea from the highlighted sentence. Like the highlighted sentence, it says that the form of functional objects is not arbitrary, but it does not say that it is physical laws that determine basic form. Only choice A makes the same point as the highlighted sentence and includes all the essential meaning.
3. **B.** The question tells you to look for the answer in paragraph 2. You do not need to skim the entire passage to find the relevant information. Choice A says that sculptors stopped putting cannonballs under the raised legs of horses in statues because they learned how make the statue weigh less and not require support for the leg. The passage does not mention making the statues weigh less; it says that sculptors learned a better way to support the weight. Choice C says that the change occurred only because people’s taste changed, meaning that the cannonballs were never structurally necessary. That directly contradicts the passage. Choice D says that the cannonballs weakened the structure of the statues. This choice also contradicts the passage. Choice B correctly identifies the reason the passage gives for the change: sculptors developed a way to strengthen the statue from the inside, making the cannonballs physically unnecessary.
4. **A.** You should note that the sentence that first mentions “bronze statues of horses” begins “For example...” The author is giving an example of something he has introduced earlier in the paragraph. The paragraph overall contrasts how the constraints of physical laws affect the fine arts differently from applied arts or crafts. The fine artist is not concerned with making an object that is useful, so he or she is less constrained than the applied artist. However, because even a fine-arts object is made of some material, the artist must take into account the physical properties of the material. In the passage, the author uses the example of the bronze statues of horses to discuss how artists had to include some support for the raised foreleg of the horse because of the physical properties of the bronze. So the correct answer is choice A.
5. **ACF. A:** As the introductory sentence states, the passage is mainly a contrast of applied-art objects and fine-art objects. The main point of contrast is functionality: applied-art objects are functional, whereas fine-art objects are not. The first part of the passage explains the consequences of functionality for the materials and “basic forms” of applied-art objects. The second part of the passage explains the consequences of not being functional to the materials and forms of fine-art objects. A good summary of the passage must include the definition of “applied-art objects” and the major consequence (objects with the same function will follow similar patterns), so Choice A should be included. **B:** Although this statement is true, it is not the main point of the first paragraph or of the passage. In fact, it contrasts with the main point of the paragraph: objects that have the same function are all similar. The last sentence of the first paragraph says that the Shang Dynasty vase and the Inca vase are different in “incidental details,” but the “basic form” is the same. Including Choice B in the summary misrepresents the passage. **C:** Because the passage contrasts applied art objects and fine-art objects, a good summary should include the basic difference. Including Choice C in the summary provides the basic contrast discussed in the passage: applied art objects are functional; fine-art objects are not. Fine-art objects are not as constrained as applied-art objects because they do not have to perform a function. **D:** Choice D summarizes the information in sentences 9, 10, and 11 of paragraph 2. Within the context of the passage, this information helps you understand the meaning of the limitations that materials can impose on fine artists. However, remember that the directions say to choose the statements that express the most important ideas in the passage. The example is less important than the general statements of difference. If Choice D is included, then Choice A or 3 or 6 would be left out and the summary would be missing an essential point of contrast between fine arts and applied arts. **E:** This choice should be excluded because it is not supported by the passage. It is a misreading of paragraph 3, which says that the difference in attitude between fine

artists and applied artists has not changed. Obviously, a choice that contradicts the information or argument in the passage should not be part of your summary. **F:** The last paragraph of the passage presents a further consequence of the basic contrast between applied-art objects and fine-art objects. This is the difference between the attitude of fine artists toward their materials and the attitude of applied artists toward their materials. A good summary will include this last contrast.

6. **The applied arts: BEF; the fine arts: AD. A:** This is an example of a correct answer that requires you to identify an abstract concept based on text information and paraphrases of text information. In paragraph 2, sentence 5, the passage states that the primary purpose of Fine Art is not function. Then, in paragraph 2, sentence 11, the passage mentions a situation in which a sculptor had to sacrifice an aesthetic purpose due to the laws of physics. Putting these statements together, the reader can infer that fine artists, such as sculptors, are primarily concerned with aesthetics. **B:** This is stated more directly than the previous correct answer. Paragraph 1, sentences 1, 2, and 3 make it clear how important function is in the applied arts. At the same time, paragraph 2 states that Fine Arts are not concerned with function, so the only correct place for this statement is in the Applied Arts category. **C:** This idea is explicitly refuted by the last sentence of paragraph 1 in reference to the applied arts. That sentence (referring only to applied arts) states that the incidental details of such objects do vary, so this answer cannot be placed in the applied arts category. This subject is not discussed at all in reference to fine art objects, so it cannot be correctly placed in that category either. **D:** This is stated explicitly in the last paragraph of the passage. In that paragraph, it is made clear that this applies only to practitioners of the fine arts. **E:** In paragraph 1, sentence 5, the passage states that certain laws of physics are universal. Then in sentence 7, that idea is further developed with the statement that functional forms can vary only within limits. From these two sentences, you can conclude that because of the laws of physics and the need for functionality, the basic forms of applied art objects will vary little across cultures. **F:** This is stated explicitly in the last paragraph of the passage. In that paragraph, it is made clear that this applies only to practitioners of the applied arts. **G:** This answer choice is implicitly refuted in reference to applied arts in the next to last sentence of paragraph 1. That sentence notes that both Shang Dynasty and Inca vases are identifiable as such based upon differences in detail. By inference, then, it seems that it is not difficult to determine an applied-art object's place of origin. Like the previous incorrect answer, this idea is not discussed at all in reference to fine art objects, so it cannot be correctly placed in that category either.

### 笔记区

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**Opportunists and Competitors**

Growth, reproduction, and daily metabolism all require an organism to expend energy. The expenditure of energy is essentially a process of budgeting, just as finances are budgeted. If all of one's money is spent on clothes, there may be none left to buy food or go to the movies. Similarly, a plant or animal cannot squander all its energy on growing a big body if none would be left over for reproduction, for this is the surest way to extinction.

All organisms, therefore, allocate energy to growth, reproduction, maintenance, and storage. No choice is involved; this allocation comes as part of the genetic package from the parents. Maintenance for a given body design of an organism is relatively constant. Storage is important, but ultimately that energy will be used for maintenance, reproduction, or growth. Therefore the principal differences in energy allocation are likely to be between growth and reproduction.

Almost all of an organism's energy can be diverted to reproduction, with very little allocated to building the body. Organisms at this extreme are "opportunists." At the other extreme are "competitors," almost all of whose resources are invested in building a huge body, with a bare minimum allocated to reproduction.

Dandelions are good examples of opportunists. Their seed heads raised just high enough above the ground to catch the wind, the plants are no bigger than they need be, their stems are hollow, and all the rigidity comes from their water content. Thus, a minimum investment has been made in the body that becomes a platform for seed dispersal. These very short-lived plants reproduce prolifically; that is to say they provide a constant rain of seed in the neighborhood of parent plants. A new plant will spring up wherever a seed falls on a suitable soil surface, but because they do not build big bodies, they cannot compete with other plants for space, water, or sunlight. **These plants are termed opportunists because they rely on their seeds' falling into settings where competing plants have been removed by natural processes, such as along an eroding riverbank, on landslips, or where a tree falls and creates a gap in the forest canopy.**

Opportunists must constantly invade new areas to compensate for being displaced by more competitive species. Human landscapes of lawns, fields, or flowerbeds provide settings with bare soil and a lack of competitors that are perfect habitats for colonization by opportunists. ■ Hence, many of the strongly opportunistic plants are the common weeds of fields and gardens. ■

Because each individual is short-lived, the population of an opportunist species is likely to be adversely affected by drought, bad winters, or floods. ■ If their population is tracked through time, it will be seen to be particularly unstable—soaring and plummeting in irregular cycles. ■

The opposite of an opportunist is a competitor. These organisms tend to have big bodies, are long-lived, and spend relatively little effort each year on reproduction. An oak tree is a good example of a competitor. A massive oak claims its ground for 200 years or more, outcompeting all other would-be canopy trees by casting a dense shade and drawing up any free water in the soil. The leaves of an oak tree taste foul because they are rich in tannins, a chemical that renders them distasteful or indigestible to many organisms. The tannins are part of the defense mechanism that is essential to longevity. Although oaks produce thousands of acorns, the investment in a crop of acorns is small compared with the energy spent on building leaves, trunk, and roots. Once an oak tree becomes established, it is likely to survive minor cycles of drought and even fire. A population of oaks is likely to be relatively stable through time, and its survival is likely to depend more on its ability to withstand the pressures of competition or predation than on its ability to take advantage of chance events. It should be noted, however, that the pure opportunist or pure competitor is rare in nature, as most species fall between the extremes of a continuum, exhibiting a blend of some opportunistic and some competitive characteristics.

1. The word “squander” in the passage is closest in meaning to
  - (A) extend
  - (B) transform
  - (C) activate
  - (D) waste
2. The word “none” in the passage refers to
  - (A) food
  - (B) plant or animal
  - (C) energy
  - (D) big body
3. In paragraph 1, the author explains the concept of energy expenditure by
  - (A) Identifying types of organisms that became extinct
  - (B) Comparing the scientific concept to a familiar human experience
  - (C) Arguing that most organisms conserve rather than expend energy
  - (D) Describing the processes of growth, reproduction, and metabolism
4. According to the passage, the classification of organisms as “opportunists” or “competitors” is determined by
  - (A) How the genetic information of an organism is stored and maintained
  - (B) The way in which the organism invests its energy resources
  - (C) Whether the climate in which the organism lives is mild or extreme
  - (D) The variety of natural resources the organism consumes in its environment
5. The word “dispersal” in the passage is closest in meaning to
  - (A) development
  - (B) growth
  - (C) distribution
  - (D) protection
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Because their seeds grow in places where competing plants are no longer present, dandelions are classified as opportunists.
  - (B) Dandelions are called opportunists because they contribute to the natural processes of erosion and the creation of gaps in the forest canopy.
  - (C) The term opportunists apply to plants whose seeds fall in places where they can compete with the seeds of other plants.
  - (D) The term opportunists apply to plants whose falling seeds are removed by natural processes.
7. The word “massive” in the passage is closest in meaning to
  - (A) huge
  - (B) ancient
  - (C) common
  - (D) successful
8. All of the following are mentioned in paragraph 7 as contributing to the longevity of an oak tree EXCEPT
  - (A) The capacity to create shade
  - (B) Leaves containing tannin
  - (C) The ability to withstand mild droughts and fire
  - (D) The large number of acorns the tree produces
9. According to the passage, oak trees are considered competitors because
  - (A) They grow in areas free of opportunists
  - (B) They spend more energy on their leaves, trunks and roots than on their acorns
  - (C) Their population tends to increase or decrease in irregular cycles
  - (D) Unlike other organisms, they do not need much water or sunlight

**10. In paragraph 7, the author suggests that most species of organisms**

- (A) Are primarily opportunists
- (B) Are primarily competitors
- (C) Begin as opportunists and evolve into competitors
- (D) Have some characteristics of opportunists and some of competitors

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Such episodic events will cause a population of dandelions, for example, to vary widely.

**Where would the sentence best fit?**

**12. Directions: Select the appropriate phrases from the answer choices and match them to the type of organism to which they relate. TWO of the answer choices will NOT be used. Select each phrase you select in the appropriate column of the table. This question is worth 4 points.**

Opportunists (FOUR):
----------------------

Competitors (THREE):
----------------------

**Answer choices**

- (A) Vary frequently the amount of energy they spend in body maintenance
- (B) Have mechanisms for protecting themselves from predation
- (C) Succeed in locations where other organisms have been removed
- (D) Have relatively short life spans
- (E) Invest energy in the growth of large, strong structures
- (F) Have populations that are unstable in response to climate conditions
- (G) Can rarely find suitable soil for reproduction
- (H) Produce individuals that can withstand changes in the environmental conditions
- (I) Reproduce in large numbers

### 参考答案与解析

1. 选 **D**。目前暂无解析。
2. 选 **C**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **B**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **A**。目前暂无解析。
7. 选 **A**。目前暂无解析。
8. 选 **D**。目前暂无解析。
9. 选 **B**。目前暂无解析。
10. 选 **D**。目前暂无解析。
11. 选 **C**。目前暂无解析。
12. Opportunists 选 **CDFI**, Competitors 选 **BEH**。  
目前暂无解析。

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难度：易 / 中 / 难

错误：     个

**Lascaux Cave Paintings**

In Southwest France in the 1940's, playing children discovered Lascaux Grotto, a series of narrow cave chambers that contain huge prehistoric paintings of animals. Many of these beasts are as large as 16 feet (almost 5 meters). Some follow each other in solemn parades, but others swirl about, sideways and upside down. The animals are bulls, wild horses, reindeer, bison, and mammoths outlined with charcoal and painted mostly in reds, yellow, and browns. Scientific analysis reveals that the colors were derived from ocher and other iron oxides ground into a fine powder. Methods of applying color varied: some colors were brushed or smeared on rock surfaces and others were blown or sprayed. It is possible that tubes made from animal bones were used for spraying because hollow bones, some stained with pigment, have been found nearby.

One of the most puzzling aspects of the paintings is their location. Other rock paintings — for example, those of Bushmen in South Africa — are either located near cave entrances or completely in the open. ■ Cave paintings in France and Spain, however, are in recesses and caverns far removed from original cave entrances. ■ This means that artists were forced to work in cramped spaces and without sources of natural light. ■ It also implies that whoever made them did not want them to be easily found. ■ Since cave dwellers normally lived close to entrances, there must have been some reason why so many generations of Lascaux cave dwellers hid their art.

Scholars offer three related but different opinions about the mysterious origin and significance of these paintings. One opinion is that the paintings were a record of seasonal migrations made by herds. Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies.

Another opinion is that the paintings were directly related to hunting and were an essential part of a special preparation ceremony. This opinion holds that the pictures and whatever ceremony they accompanied were an ancient method of psychologically motivating hunters. It is conceivable that before going hunting the hunters would draw or study pictures of animals and imagine a successful hunt. Considerable support exists for this opinion because several animals in the pictures are wounded by arrows and spears. This opinion also attempts to solve the overpainting by explaining that an animal's picture had no further use after the hunt.

A third opinion takes psychological motivation much further into the realm of tribal ceremonies and mystery: the belief that certain animals assumed mythical significance as ancient ancestors or protectors of a given tribe or clan. Two types of images substantiate this theory: the strange, indecipherable geometric shapes that appear near some animals, and the few drawings of men. Wherever men appear they are crudely drawn and their bodies are elongated and rigid. Some men are in a prone position and some have bird or animal heads. Advocates for this opinion point to reports from people who have experienced a trance state, a highly suggestive state of low consciousness between waking and sleeping. Uniformly, these people experienced weightlessness and the sensation that their bodies were being stretched lengthwise. Advocates also point to people who believe that the forces of nature are inhabited by spirits, particularly *shamans*\* who believe that an animal's spirit and energy is transferred to them while in a trance. One Lascaux narrative picture, which shows a man with a birdlike head and a wounded animal, would seem to lend credence to this third opinion, but there is still much that remains unexplained. For example, where is the proof that the man in the picture is a shaman? He could as easily be a hunter wearing a headmask. Many tribal hunters, including some Native Americans, camouflaged themselves by wearing animal heads and hides.

Perhaps so much time has passed that there will never be satisfactory answers to the cave images, but their mystique only adds to their importance. Certainly a great art exists, and by its existence reveals that ancient human beings were not without intelligence, skill, and sensitivity.

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**Shamans:** *Holy people who act as healers and diviners*

1. The word “others” in the passage refers to
  - (A) chambers
  - (B) paintings
  - (C) beasts
  - (D) parades
2. The word “Methods” in the passage is closest in meaning to
  - (A) Ways
  - (B) Shades
  - (C) Stages
  - (D) Rules
3. What are the bones found in the Lascaux caves believed to indicate?
  - (A) Wild animals sometimes lived in the cave chambers.
  - (B) Artists painted pictures on both walls and bones.
  - (C) Artists ground them into a fine powder to make paint.
  - (D) Artists developed special techniques for painting the walls.
4. Why does the author mention Bushmen in South Africa in paragraph 2?
  - (A) To suggest that ancient artists from all over the world painted animals on rocks
  - (B) To contrast the location of their rock paintings to those found at Lascaux
  - (C) To support the claim that early artists worked in cramped spaces
  - (D) To give an example of other artists who painted in hidden locations
5. What can be inferred from paragraph 2 about cave painters in France and Spain?
  - (A) They also painted rocks outside caves.
  - (B) They did not live close to the cave entrances.
  - (C) They developed their own sources of light to use while painting.
  - (D) Their painting practices did not last for many years.
6. Why does the author mention secret ceremonies?
  - (A) To present a common opinion held by many scholars
  - (B) To suggest a similarity between two opinions held by scholars
  - (C) To suggest a possible explanation for a weakness in an opinion expressed in the passage
  - (D) To give evidence that contradicts a major opinion expressed in the passage
7. The word “accompanied” in the passage is closest in meaning to
  - (A) represented
  - (B) developed into
  - (C) were associated with
  - (D) came after
8. According to paragraph 4, why do some scholars believe that the paintings were related to hunting?
  - (A) Because some tools used for painting were also used for hunting.
  - (B) Because cave inhabitants were known to prefer animal food rather than plant food.
  - (C) Because some of the animals are shown wounded by weapons.
  - (D) Because many hunters were also typically painters.
9. According to paragraph 5, why do some scholars refer to a trance state to help understand the cave paintings?
  - (A) To explain the state of consciousness the artists were in when they painted their pictures
  - (B) To demonstrate the mythical significance of the strange geometric shapes
  - (C) To indicate that trance states were often associated with activities that took place inside caves
  - (D) To give a possible reason for the strange appearance of the men painted on the cave walls
10. According to paragraph 5, if the man pictured with the birdlike head is not a shaman, he may have worn the headmask
  - (A) To look like an animal while a hunt took place
  - (B) To frighten off other hunters competing for food
  - (C) To prove that he is not a shaman

(D) To resist forces of nature thought to be present in animals

**11. According to paragraph 6, why might the puzzling questions about the paintings never be answered?**

- (A) Keeping the paintings a mystery will increase their importance.
- (B) The artists hid their tools with great intelligence and skill.
- (C) Too many years have gone by since the images were painted.
- (D) Answering the question is not very important to scholars.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This made it easy for the artists to paint and display them for the rest of the cave dwellers.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Scholars have wondered about the meaning of the subjects, location, and overpainting of Lascaux cave images.

**Answer choices**

- (A) The paintings may have recorded information about animal migrations, and may only have been useful for one migration at a time.
- (B) The human figures represented in the paintings appear to be less carefully shaped than those of animals.
- (C) It is possible that the animals in the paintings were of mythical significance to the tribe, and the paintings reflected an important spiritual practice.
- (D) Unlike painters of the recently discovered paintings, other Lascaux cave painters usually painted on rocks near cave entrances or in open spaces outside the caves.
- (E) Some scholars believe that the paintings motivated hunters by allowing them to picture a successful hunt.
- (F) Scientific analysis suggests that paintings were sprayed onto the rock walls with tubes made from animal bones.

### 参考答案与解析

1. 选 **C**。目前暂无解析。
2. 选 **A**。目前暂无解析。
3. 选 **D**。目前暂无解析。
4. 选 **B**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **C**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **D**。目前暂无解析。
10. 选 **A**。目前暂无解析。
11. 选 **C**。目前暂无解析。
12. 选 **A**。目前暂无解析。
13. 选 **ACE**。目前暂无解析。

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难度：易 / 中 / 难

错误：     个

**Electricity from Wind**

Since 1980, the use of wind to produce electricity has been growing rapidly. ■ In 1994 there were nearly 20,000 wind turbines worldwide, most grouped in clusters called wind farms that collectively produced 3,000 megawatts of electricity. ■ Most were in Denmark (which got 3 percent of its electricity from wind turbines) and California (where 17,000 machines produced 1 percent of the state's electricity, enough to meet the residential needs of a city as large as San Francisco). ■ In principle, all the power needs of the United States could be provided by exploiting the wind potential of just three states — North Dakota, South Dakota, and Texas. ■

Large wind farms can be built in six months to a year and then easily expanded as needed. With a moderate to fairly high net energy yield, these systems **emit** no heat-trapping carbon dioxide or other air pollutants and need no water for cooling; manufacturing them produces little water pollution. The land under wind turbines can be used for grazing cattle and other purposes, and leasing land for wind turbines can provide extra income for farmers and ranchers.

Wind power has a significant cost advantage over nuclear power and has become competitive with coal-fired power plants in many places. With new technological advances and mass production, projected cost declines should make wind power one of the world's cheapest ways to produce electricity. In the long run, electricity from large wind farms in remote areas might be used to make hydrogen gas from water during periods when there is less than peak demand for electricity. The hydrogen gas could then be fed into a storage system and used to generate electricity when additional or backup power is needed.

Wind power is most economical in areas with steady winds. In areas where the wind dies down, backup electricity from a utility company or from an energy storage system becomes necessary. Backup power could also be provided by linking wind farms with a solar cell, with conventional or pumped-storage hydropower, or with efficient natural-gas-burning turbines. Some drawbacks to wind farms include visual pollution and noise, although these can be overcome by improving their design and locating them in isolated areas.

**Large wind farms might also interfere with the flight patterns of migratory birds in certain areas, and they have killed large birds of prey (especially hawks, falcons, and eagles) that prefer to hunt along the same ridge lines that are ideal for wind turbines.** The killing of birds of prey by wind turbines has pitted environmentalists who champion wildlife protection against environmentalists who promote renewable wind energy. Researchers are evaluating how serious **this problem** is and hope to find ways to eliminate or sharply reduce this problem. Some analysts also contend that the number of birds killed by wind turbines is dwarfed by birds killed by other human-related sources and by the potential loss of entire bird species from possible global warming. Recorded deaths of birds of prey and other birds in wind farms in the United States currently **amount to** no more than 300 per year. By contrast, in the United States an estimated 97 million birds are killed each year when they collide with buildings made of plate glass, 57 million are killed on highways each year; at least 3.8 million die annually from pollution and poisoning; and millions of birds are electrocuted each year by transmission and distribution lines carrying power produced by nuclear and coal power plants.

The technology is in place for a major expansion of wind power worldwide. Wind power is a virtually unlimited source of energy at favorable sites, and even excluding environmentally sensitive areas, the global potential of wind power is much higher than the current world electricity use. In theory, Argentina, Canada, Chile, China, Russia, and the United Kingdom could use wind to meet all of their energy needs. Wind power experts **project** that by the middle of the twenty-first century wind power could supply more than 10 percent of the world's electricity and 10-25 percent of the electricity used in the United States.

1. **Based on the information in paragraph 1, which of the following best explains the term wind farms?**
  - (A) Farms using windmills to pump water
  - (B) Research centers exploring the uses of wind
  - (C) Types of power plant common in North Dakota
  - (D) Collections of wind turbines producing electric power
2. **The word “emit” in the passage is closest in meaning to**
  - (A) use
  - (B) require
  - (C) release
  - (D) destroy
3. **Based on the information in paragraph 3 and paragraph 4, what can be inferred about the states of North Dakota, South Dakota, and Texas mentioned at the end of paragraph 1?**
  - (A) They rely largely on coal-fired power plants.
  - (B) They contain remote areas where the winds rarely die down.
  - (C) Over 1 percent of the electricity in these states is produced by wind farms.
  - (D) Wind farms in these states are being expanded to meet the power needs of the United States.
4. **According to paragraph 3, which of the following is true about periods when the demand for electricity is relatively low?**
  - (A) These periods are times when wind turbines are powered by hydrogen gas.
  - (B) These periods provide the opportunity to produce and store energy for future use.
  - (C) These periods create storage problems for all forms of power generation.
  - (D) These periods occur as often as periods when the demand for electricity is high.
5. **In paragraph 4, the author states that in areas where winds are not steady**
  - (A) Power does not reach all customers
  - (B) Wind farms cannot be used
  - (C) Solar power is more appropriate
  - (D) Backup systems are needed
6. **According to paragraph 4, what can be inferred about the problems of visual pollution and noise associated with wind farms?**
  - (A) Both problems affect the efficiency of wind farms.
  - (B) Possible solutions are known for both problems.
  - (C) Wind power creates more noise than visual pollution.
  - (D) People are more concerned about visual pollution than noise.
7. **The phrase “this problem” in the passage refers to**
  - (A) Interference with the flight patterns of migrating birds in certain areas
  - (B) Building ridge lines that are ideal for wind turbines
  - (C) The killing of birds of prey by wind turbines
  - (D) Meeting the demands of environmentalists who promote renewable wind energy
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Hawks, falcons, and eagles prefer to hunt along ridge lines, where wind turbines can kill large numbers of migratory birds.
  - (B) Wind turbines occasionally cause migratory birds to change their flight patterns and therefore may interfere with the areas where birds of prey prefer to hunt.
  - (C) Some of the best locations for large wind farms are places that may cause problems for migrating birds and birds of prey.
  - (D) Large wind farms in certain areas kill hawks, falcons, and eagles and thus might create a more ideal path for the flight of migratory birds.
9. **In paragraph 5, why does the author give details about the estimated numbers of birds killed each year?**
  - (A) To argue that wind farms should not be built along ridge lines

- (B) To point out that the deaths of migratory birds exceed the deaths of birds of prey
- (C) To explain why some environmentalists oppose wind energy
- (D) To suggest that wind turbines result in relatively few bird deaths

**10. The phrase “amount to” in the passage is closest in meaning to**

- (A) can identify
- (B) change
- (C) are reduced by
- (D) total

**11. The word “project” in the passage is closest in meaning to**

- (A) estimate
- (B) respond
- (C) argue
- (D) plan

**12. Which of the following statements most accurately reflects the author’s opinion about wind energy?**

- (A) Wind energy production should be limited to large wind farms.
- (B) The advantages of wind energy outweigh the disadvantages.
- (C) The technology to make wind energy safe and efficient will not be ready until the middle of the twenty-first century.
- (D) Wind energy will eventually supply many countries with most of their electricity.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Some companies in the power industry are aware of this wider possibility and are planning sizable wind-farm projects in states other than California.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

In the future, wind power is likely to become a major source of the world’s energy supply.

**Answer choices**

- (A) Wind farms have already produced sufficient amounts of electricity to suggest that wind power could become an important source of electric power.
- (B) Wind power has several advantages, such as low pollution and projected cost declines, compared to other energy sources.
- (C) Responding to environmentalists concerned about birds killed by wind turbines, analysts point to other human developments that are even more dangerous to birds.
- (D) The wind energy produced by just a small number of states could supply all of the power needs of the United States.
- (E) Although wind power is not economical in areas with steady winds, alternative wind sources can be used to simulate wind power.
- (F) Smaller countries, which use less electricity than large countries, are especially suited to use wind power to meet all their energy needs.

### 参考答案与解析

1. 选 **D**。目前暂无解析。
2. 选 **C**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **B**。目前暂无解析。
5. 选 **D**。目前暂无解析。
6. 选 **B**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **D**。目前暂无解析。
10. 选 **D**。目前暂无解析。
11. 选 **A**。目前暂无解析。
12. 选 **B**。目前暂无解析。
13. 选 **D**。目前暂无解析。
14. 选 **ABC**。目前暂无解析。

### 笔记区

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错误：     个

**Meteorite Impact and Dinosaur Extinction**

There is increasing evidence that the impacts of meteorites have had important effects on Earth, particularly in the field of biological evolution. Such impacts continue to pose a natural hazard to life on Earth. Twice in the twentieth century, large meteorite objects are known to have collided with Earth.

If an impact is large enough, it can disturb the environment of the entire Earth and cause an ecological catastrophe. The best-documented such impact took place 65 million years ago at the end of the Cretaceous period of geological history. This break in Earth's history is marked by a mass extinction, when as many as half the species on the planet became extinct. While there are a dozen or more mass extinctions in the geological record, the Cretaceous mass extinction has always intrigued paleontologists because it marks the end of the age of the dinosaurs. For tens of millions of years, those great creatures had flourished. Then, suddenly, they disappeared.

The body that impacted Earth at the end of the Cretaceous period was a meteorite with a mass of more than a trillion tons and a diameter of at least 10 kilometers. Scientists first identified this impact in 1980 from the worldwide layer of sediment deposited from the dust cloud that enveloped the planet after the impact. This sediment layer is enriched in the rare metal iridium and other elements that are relatively abundant in a meteorite but very rare in the crust of Earth. Even diluted by the terrestrial material excavated from the crater, this component of meteorites is easily identified. By 1990 geologists had located the impact site itself in the Yucatán region of Mexico. The crater, now deeply buried in sediment, was originally about 200 kilometers in diameter.

This impact released an enormous amount of energy, excavating a crater about twice as large as the lunar crater Tycho. The explosion lifted about 100 trillion tons of dust into the atmosphere, as can be determined by measuring the thickness of the sediment layer formed when this dust settled to the surface. Such a quantity of material would have blocked the sunlight completely from reaching the surface, plunging Earth into a period of cold and darkness that lasted at least several months. The explosion is also calculated to have produced vast quantities of nitric acid and melted rock that sprayed out over much of Earth, starting widespread fires that must have consumed most terrestrial forests and grassland. Presumably, those environmental disasters could have been responsible for the mass extinction, including the death of the dinosaurs.

Several other mass extinctions in the geological record have been tentatively identified with large impacts, but none is so dramatic as the Cretaceous event. But even without such specific documentation, it is clear that impacts of this size do occur and that their results can be catastrophic. What is a catastrophe for one group of living things, however, may create opportunities for another group. Following each mass extinction, there is a sudden evolutionary burst as new species develop to fill the ecological niches opened by the event.

Impacts by meteorites represent one mechanism that could cause global catastrophes and seriously influence the evolution of life all over the planet. ■ According to some estimates, the majority of all extinctions of species may be due to such impacts. ■ Such a perspective fundamentally changes our view of biological evolution. ■ The standard criterion for the survival of a species is its success in competing with other species and adapting to slowly changing environments. ■ Yet an equally important criterion is the ability of a species to survive random global ecological catastrophes due to impacts.

**Earth is a target in a cosmic shooting gallery, subject to random violent events that were unsuspected a few decades ago.** In 1991 the United States Congress asked NASA to investigate the hazard posed today by large impacts on Earth. The group conducting the study concluded from a detailed analysis that impacts from meteorites can indeed be hazardous. Although there is always some risk that a large impact could occur, careful study shows that this risk is quite small.

1. The word “pose” in the passage is closest in the meaning to
  - (A) claim
  - (B) model
  - (C) assume
  - (D) present
2. In paragraph 2, why does the author include the information that dinosaurs had flourished for tens of millions of years and then suddenly disappeared?
  - (A) To support the claim that the mass extinction at the end of the Cretaceous is the best-documented of the dozen or so mass extinctions in the geological record
  - (B) To explain why as many as half of the species on Earth at the time are believed to have become extinct at the end of the Cretaceous
  - (C) To explain why paleontologists have always been intrigued by the mass extinction at the end of the Cretaceous
  - (D) To provide evidence that an impact can be large enough to disturb the environment of the entire planet and cause an ecological disaster
3. Which of the following can be inferred from paragraph 3 about the location of the meteorite impact in Mexico?
  - (A) The location of the impact site in Mexico was kept secret by geologists from 1980 to 1990.
  - (B) It was a well-known fact that the impact had occurred in the Yucat region.
  - (C) Geologists knew that there had been an impact before they knew where it had occurred.
  - (D) The Yucat region was chosen by geologists as the most probable impact site because of its climate.
4. According to paragraph 3, how did scientists determine that a large meteorite had impacted Earth?
  - (A) They discovered a large crater in the Yucat region of Mexico.
  - (B) They found a unique layer of sediment worldwide.
  - (C) They were alerted by archaeologists who had been excavating in the Yucat region.
  - (D) They located a meteorite with a mass of over a trillion tons.
5. The word “excavating” in the passage is closest in the meaning to
  - (A) digging out
  - (B) extending
  - (C) destroying
  - (D) covering up
6. The word “consumed” in the passage is closest in the meaning to
  - (A) changed
  - (B) exposed
  - (C) destroyed
  - (D) covered
7. According to paragraph 4, all of the following statements are true of the impact at the end of the Cretaceous period EXCEPT
  - (A) A large amount of dust blocked sunlight from Earth
  - (B) Earth became cold and dark for several months
  - (C) New elements were formed in Earth’s crust
  - (D) Large quantities of nitric acid were produced
8. The phrase “tentatively identified” in the passage is closest in the meaning to
  - (A) identified after careful study
  - (B) identified without certainty
  - (C) occasionally identified
  - (D) easily identified
9. The word “perspective” in the passage is closest in the meaning to
  - (A) sense of values
  - (B) point of view
  - (C) calculation
  - (D) complication

**10. Paragraph 6 supports which of the following statements about the factors that are essential for the survival of a species?**

- (A) The most important factor for the survival of a species is its ability to compete and adapt to gradual changes in its environment.
- (B) The ability of a species to compete and adapt to a gradually changing environment is not the only ability that is essential for survival.
- (C) Since most extinctions of species are due to major meteorite impacts, the ability to survive such impacts is the most important factor for the survival of a species.
- (D) The factors that are most important for the survival of a species vary significantly from one species to another.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Until recently, nobody realized that Earth is exposed to unpredictable violent impacts from space.
- (B) In the last few decades, the risk of a random violent impact from space has increased.
- (C) Since most violent events on Earth occur randomly, nobody can predict when or where they will happen.
- (D) A few decades ago, Earth became the target of random violent events originating in outer space.

**12. According to the passage, who conducted investigations about the current dangers posed by large meteorite impacts on Earth?**

- (A) Paleontologists
- (B) Geologists
- (C) The United States Congress
- (D) NASA

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This is the criterion emphasized by Darwin's theory of evolution by natural selection.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Scientists have linked the mass extinction at the end of the Cretaceous with a meteorite impact on Earth.

**Answer choices**

- (A) Scientists had believed for centuries that meteorite activity influenced evolution on Earth.
- (B) An iridium-enriched sediment layer and a large impact crater in the Yucat provide evidence that a large meteorite struck Earth about 65 million years ago.
- (C) The site of the large meteorite impact at the end of the Cretaceous period was identified in 1990.
- (D) Large meteorite impacts, such as one at the end of the Cretaceous period, can seriously affect climate, ecological niches, plants, and animals.
- (E) There have also been large meteorite impacts on the surface of the Moon, leaving craters like Tycho.
- (F) Meteorite impacts can be advantageous for some species, which thrive, and disastrous for other species, which become extinct.

### 参考答案与解析

1. 选 **D**。目前暂无解析。
2. 选 **C**。目前暂无解析。
3. 选 **C**。目前暂无解析。
4. 选 **B**。目前暂无解析。
5. 选 **A**。目前暂无解析。
6. 选 **C**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **B**。目前暂无解析。
9. 选 **B**。目前暂无解析。
10. 选 **B**。目前暂无解析。
11. 选 **A**。目前暂无解析。
12. 选 **D**。目前暂无解析。
13. 选 **D**。目前暂无解析。
14. 选 **BDF**。目前暂无解析。

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**Is Personality Consistent?**

The recent debate over the consistency of personality began in 1968 with the publication of a book by psychologist Walter Mischel. He reported that personality is much less consistent from one situation to another than had been commonly believed. Thus, the correlation between any two behaviors presumed to represent the same underlying personality trait is relatively low. This means that one could not predict with **confidence** whether a person who scored high on the trait of generosity would behave in a generous manner in a given situation. Based on his review of research findings, Mischel concluded that behavior is influenced more by the situations in which we find ourselves than by any personality characteristics that we might possess. Though Mischel stimulated the recent debate over personality consistency, the issue is not new. Forty years before Mischel published his findings, psychologists reported research showing that children's honesty was inconsistent across situations. A child might cheat on a test but not in an athletic event, or lie at school but not at home.

If personality is inconsistent across situations, why do we perceive it to be consistent in our everyday lives? First, we might confuse the consistency of behavior in a given situation over time with the consistency of that behavior across different situations. If a fellow student is consistently humorous in your psychology class, you might mistakenly infer that she is humorous at home and at parties. Second, we tend to avoid situations that are inconsistent with our conception of our personalities. If you view yourself as even-tempered, you may avoid situations that might make you lose your temper. Third, our first impression of a person can make us **discount** later behavior that is inconsistent with it. If someone is friendly to you the first time you meet but is rude to you the next time you meet, you might say that he was "not himself" today. And fourth, our perception of cross-situational consistency in others might reflect a powerful situational factor: our presence in their environment. If others adapt their behavior to our presence, we may erroneously infer that they are consistent across situations.

These attacks on cross-situational consistency have provoked responses from those who claim there is more cross-situational consistency than Mischel and his allies believe. First, individuals do show consistency on certain traits. But how do we know which traits? One way to find out is to ask. People who claim to be consistent on a given trait tend to exhibit behaviors reflecting that trait across situations. In one study, students were asked to judge how consistent they were on the trait of friendliness. Those who claimed to be friendly across situations were, in fact, more consistently friendly than were students who did not claim to be **verified** by their peers, their parents, and other observers.

Second, cross-situational consistency in behavior depends on whether a person is a high self-monitor or a low self-monitor. ■ High self-monitors are concerned about how people perceive them and adapt their behaviors to fit specific situations. ■ Low self-monitors, by contrast, are less concerned about how people perceive them and do not adapt their behaviors as much. ■ As a result, low self-monitors show greater cross-situational consistency in their behaviors than do high self-monitors. ■

Third, many of the studies that Mischel reviewed were guaranteed to find low cross-situational consistency, because they either correlated trait test scores with single instances of behaviors or correlated single instances of behaviors with each other. This would be like trying to predict your grade in a biology class based on your grade in a history class. The prediction of future behavior could be wrong because many factors influence your performance in any given situation. Similarly, a given personality trait is not the only influence on your behavior in a given situation.

Psychologists have achieved greater success in demonstrating cross-situational consistency by using behavioral aggregation. In aggregating behaviors, you would observe a person's behavior across a number of situations. You would then determine how the person typically, but not necessarily always, behaves. A "humorous" person would be humorous in many, but not all, situations. **When we predict how a person will typically behave, instead of how that person will behave in specific situations, the correlation between traits and behaviors becomes relatively high.**

1. The word “**confidence**” in the passage is closest in meaning to  
(A) certainty (B) recognition (C) efficiency (D) documentation
2. According to paragraph 1, what was Mischel’s position in the book he published in 1968?  
(A) It is impossible to predict whether someone who scored high on a given personality trait, such as generosity, would continue to score high on that trait in the future.  
(B) The way a person behaves in a given situation is not determined primarily by personality traits that person has.  
(C) Most of the research done in the 40 years before the book was published had overestimated the influence of situations on how people behaved.  
(D) The correlation between any two personality traits is too low to provide support for the common view that people’s personalities are generally consistent.
3. Which of the following best describes the relation of paragraph 2 to paragraph 1?  
(A) Paragraph 2 introduces new research findings that challenge the conclusion presented in paragraph 1.  
(B) Paragraph 2 presents common situations that the conclusion presented in paragraph 1 cannot account for.  
(C) Paragraph 2 provides the evidence on which the conclusion presented in paragraph 1 was based.  
(D) Paragraph 2 explains why our experiences of personality do not seem to support the conclusion presented in paragraph 1.
4. According to paragraph 2, each of the following could be responsible for our perception that most people behave consistently across situations EXCEPT  
(A) People tend to avoid situations in which they would be likely to behave in ways that are inconsistent with their self-image.  
(B) We often overlook the fact that we may always encounter a person in the same type of situation.  
(C) We form an initial impression of people’s personality the first time we meet them and gradually adjust that view as we see more of them.  
(D) People might consistently behave in a certain way whenever one person is around and in another way whenever a different person is around.
5. The word “**discount**” in the passage is closest in meaning to  
(A) dislike (B) explain (C) approve (D) ignore
6. According to paragraph 3, Mischel and his allies have been criticized for which of the following reasons?  
(A) They failed to recognize that a person can be consistent on certain traits even though the person might not be consistent on all traits.  
(B) They were wrong in their conclusion that people do not always behave consistently across situations.  
(C) They considered scientific research to be a more valid test of cross-situational consistency than peoples’ own judgments.  
(D) They overlooked the fact that some traits are more likely than others to result in behavior that is consistent across situations.
7. According to paragraph 3, a good indication that someone is consistent on a given trait is that the person  
(A) Exhibits behaviors reflecting that trait in certain situations  
(B) Is ready to judge others on that trait  
(C) Claims to be consistent on that trait  
(D) Is eager to talk about that trait
8. The word “**verified**” in the passage is closest in meaning to  
(A) confirmed (B) questioned (C) understood (D) viewed
9. According to paragraph 4, why are high self-monitors less likely to be consistent across situations than are low self-monitors?  
(A) High self-monitors tend to care more about their own behavior than they do about the behavior of others.  
(B) High self-monitors tend to avoid situations in which their natural way of behaving is likely to be perceived unfavorably by others.

- (C) Expectations concerning acceptable behaviors tend to be widely shared and consistent across situations.
- (D) People who are more concerned about how they appear to others are more likely to be influenced in how they behave by the people they are with.

**10. According to paragraph 5, what is wrong with many of the studies Mischel reviewed?**

- (A) They do not adequately consider that different personality traits might be highly correlated with each other.
- (B) They are based on a flawed idea of how to investigate the relation between personality traits and behaviors.
- (C) They are not consistent with each other in the way they determine trait test scores.
- (D) Their predictions about behavior are not satisfied by the results they actually obtained.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) The correlation between traits and behaviors in specific situations becomes higher when predictions are made more frequently.
- (B) When we observe a person's behavior over a long period of time, we can make fairly accurate predictions about personality traits.
- (C) It is more difficult to accurately predict how a person will behave in a specific situation than it is to predict characteristic behavior.
- (D) Both traits and typical behaviors can be observed and used to predict the consistency of a person's personality.

**12. The passage supports which of the following statements about Mischel's book?**

- (A) It quickly gained widespread acceptance among psychologists.
- (B) It focused primarily on the traits of humor and honesty.
- (C) It was not based primarily on Mischel's own research.
- (D) It reflected the views of the majority of psychologists of the time.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Their behavior varies considerably because different situations often involve different sets of people and thus quite often different standards of behavior.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Walter Mischel published a book in 1968 in which he concluded that people's behavior is determined primarily by the particular situation they are in rather than by consistent personality traits.

**Answer choices**

- (A) Mischel's findings supported the conclusions of earlier research on children's honesty.
- (B) We may mistakenly see people's behavior as consistent because we ignore evidence to the contrary or fail to recognize that our evidence comes from similar types of situations.
- (C) Mischel's opponents argue that the studies he reviewed had various shortcomings that worked together to keep correlations between personality traits and behaviors misleadingly low.
- (D) In interpreting earlier studies, Mischel did not recognize the extent to which the behavior of low self-monitors is influenced by specific situations.
- (E) By focusing on standard personality traits, Mischel and his allies failed to recognize that what affects behavior is similar to what affects tastes: many factors are involved in both cases.
- (F) Psychologists have found that when they focus on how a person typically behaves, there turns out to be relatively high behavioral consistency across situations.

### 参考答案与解析

1. 选 **A**。目前暂无解析。
2. 选 **B**。目前暂无解析。
3. 选 **D**。目前暂无解析。
4. 选 **C**。目前暂无解析。
5. 选 **D**。目前暂无解析。
6. 选 **A**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **A**。目前暂无解析。
9. 选 **D**。目前暂无解析。
10. 选 **B**。目前暂无解析。
11. 选 **C**。目前暂无解析。
12. 选 **C**。目前暂无解析。
13. 选 **B**。目前暂无解析。
14. 选 **BCF**。目前暂无解析。

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**Nineteenth-Century Politics in the United States**

The development of the modern presidency in the United States began with Andrew Jackson who swept to power in 1829 at the head of the Democratic Party and served until 1837. During his administration he immeasurably enlarged the power of the presidency. "The President is the direct representative of the American people," he lectured the Senate when it opposed him. "He was elected by the people, and is responsible to them." With this declaration, Jackson redefined the character of the presidential office and its relationship to the people.

During Jackson's second term, his opponents had gradually come together to form the Whig party. ■ Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce. ■ The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats. ■ This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. ■ The Democrats wanted the rewards of the market without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.

Whigs, on the other hand, were more comfortable with the market. For them, commerce and economic development were agents of civilization. Nor did the Whigs envision any conflict in society between farmers and workers on the one hand and businesspeople and bankers on the other. Economic growth would benefit everyone by raising national income and expanding opportunity. The government's responsibility was to provide a well-regulated economy that guaranteed opportunity for citizens of ability.

Whigs and Democrats differed not only in their attitudes toward the market but also about how active the central government should be in people's lives. Despite Andrew Jackson's inclination to be a strong President, Democrats as a rule believed in limited government. Government's role in the economy was to promote competition by destroying monopolies<sup>1</sup> and special privileges. In keeping with this philosophy of limited government, Democrats also rejected the idea that moral beliefs were the proper sphere of government action. Religion and politics, they believed, should be kept clearly separate, and they generally opposed humanitarian legislation.

The Whigs, in contrast, viewed government power positively. They believed that it should be used to protect individual rights and public liberty, and that it had a special role where individual effort was ineffective. By regulating the economy and competition, the government could ensure equal opportunity. Indeed, for Whigs the concept of government promoting the general welfare went beyond the economy. In particular, Whigs in the northern sections of the United States also believed that government power should be used to foster the moral welfare of the country. They were much more likely to favor social-reform legislation and aid to education.

In some ways the social makeup of the two parties was similar. To be competitive in winning votes, Whigs and Democrats both had to have significant support among farmers, the largest group in society, and workers. Neither party could win an election by appealing exclusively to the rich or the poor. The Whigs, however, enjoyed disproportionate strength among the business and commercial classes. Whigs appealed to planters who needed credit to finance their cotton and rice trade in the world market, to farmers who were eager to sell their surpluses, and to workers who wished to improve themselves. Democrats attracted farmers isolated from the market or uncomfortable with it, workers alienated from the emerging industrial system, and rising entrepreneurs who wanted to break monopolies and open the economy to newcomers like themselves. **The Whigs were strongest in the towns, cities, and those rural areas that were fully integrated into the market economy, whereas Democrats dominated areas of semisubsistence farming that were more isolated and languishing economically.**

1. The word “immeasurably” in the passage is closest in meaning to
  - (A) frequently
  - (B) greatly
  - (C) rapidly
  - (D) reportedly
2. According to paragraph 1, the presidency of Andrew Jackson was especially significant for which of the following reasons?
  - (A) The President granted a portion of his power to the Senate.
  - (B) The President began to address the Senate on a regular basis.
  - (C) It was the beginning of the modern presidency in the United States.
  - (D) It was the first time that the Senate had been known to oppose the President.
3. The author mentions “bankers and investors” in the passage as an example of which of the following?
  - (A) The Democratic Party’s main source of support
  - (B) The people that Democrats claimed were unfairly becoming rich
  - (C) The people most interested in a return to a simple agrarian republic
  - (D) One of the groups in favor of Andrew Jackson’s presidency
4. According to paragraph 3, Whigs believed that commerce and economic development would have which of the following effects on society?
  - (A) They would promote the advancement of society as a whole.
  - (B) They would cause disagreements between Whigs and Democrats.
  - (C) They would supply new positions for Whig Party members.
  - (D) They would prevent conflict between farmers and workers.
5. According to paragraph 3, which of the following describes the Whig Party’s view of the role of government?
  - (A) To regulate the continuing conflict between farmers and businesspeople
  - (B) To restrict the changes brought about by the market
  - (C) To maintain an economy that allowed all capable citizens to benefit
  - (D) To reduce the emphasis on economic development
6. The word “inclination” in the passage is closest in meaning to
  - (A) argument
  - (B) tendency
  - (C) example
  - (D) warning
7. According to paragraph 4, a Democrat would be most likely to support government action in which of the following areas?
  - (A) Creating a state religion
  - (B) Supporting humanitarian legislation
  - (C) Destroying monopolies
  - (D) Recommending particular moral beliefs
8. The word “concept” in the passage is closest in meaning to
  - (A) power
  - (B) reality
  - (C) difficulty
  - (D) idea
9. Which of the following can be inferred from paragraph 5 about variations in political beliefs within the Whig Party?
  - (A) They were focused on issues of public liberty.
  - (B) They caused some members to leave the Whig party.
  - (C) They were unimportant to most Whigs.
  - (D) They reflected regional interests.
10. According to paragraph 6, the Democrats were supported by all of the following groups EXCEPT

- (A) workers unhappy with the new industrial system
- (B) planters involved in international trade
- (C) rising entrepreneurs
- (D) individuals seeking to open the economy to newcomers

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Whigs were able to attract support only in the wealthiest parts of the economy because Democrats dominated in other areas.
- (B) Whig and Democratic areas of influence were naturally split between urban and rural areas, respectively.
- (C) The semisubsistence farming areas dominated by Democrats became increasingly isolated by the Whigs' control of the market economy.
- (D) The Democrats' power was greatest in poorer areas while the Whigs were strongest in those areas where the market was already fully operating.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The political system of the United States in the mid-nineteenth century was strongly influenced by the social and economic circumstances of the time.

**Answer choices**

- (A) The Democratic and Whig Parties developed in response to the needs of competing economic and political constituencies.
- (B) During Andrew Jackson's two terms as President, he served as leader of both the Democratic and Whig Parties.
- (C) The Democratic Party primarily represented the interests of the market, banks, and commerce.
- (D) In contrast to the Democrats, the Whigs favored government aid for education.
- (E) A fundamental difference between Whigs and Democrats involved the importance of the market in society.
- (F) The role of government in the lives of the people was an important political distinction between the two parties.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**参考答案与解析 (摘自 Official Guide)**

1. **B.** *Immeasurably* means “in a manner too big to be measured.” So if Jackson enlarged the President’s powers so much that the results can’t be measured, he enlarged them “greatly.”
2. **C.** The correct answer is choice C because the first sentence of the paragraph explicitly states that this was when the development of the modern presidency began. The remainder of the paragraph is devoted to explaining the significant changes in government that this development involved. The result, as stated in sentence 5, was that the nature of the presidency itself was redefined. Choice A is contradicted by the paragraph; Jackson didn’t give presidential power away, he increased it. Choice B is not mentioned in the paragraph: it says Jackson addressed the Senate, but not that this was the beginning of regular addresses. Choice D, which says that this was the first time the Senate opposed the President, is not stated in the passage.
3. **B.** The author is using *bankers and investors* as examples of people that the Democrats claimed were “manipulating” the banking system for their own profit. That means that they were unfairly becoming rich. Choices A, C, and D are all incorrect because, based upon the passage, they seem unlikely to be true. Therefore, the author would not use them as examples.
4. **A.** The paragraph says that Whigs believed commerce and economic development “would benefit everyone.” That means essentially the same thing as choice A, which says that Whigs believed economic growth would “promote the advancement of society as a whole.” “Society as a whole” is another way of saying “everyone.” Choices B and C are not mentioned in the paragraph. Choice D, about conflict between groups, is mentioned but in a different context, so it is not a belief held by Whigs.
5. **C.** This is a restatement of paragraph 3, sentence 5. The paragraph states that Whigs did not envision continuing conflict between farmers and business people, so choice A is wrong. Whigs favored changes brought about by the market, so choice B is wrong. Whigs were in favor of increased emphasis on economic development, so choice D is incorrect.
6. **B.** The fact that Jackson had an *inclination* to be a strong President means that he preferred being strong to having limited powers. In other words, his “tendency” was to favor a strong presidency, so choice B is the correct answer.
7. **C.** The correct answer is choice C, which is explicitly stated in sentence 3 of the paragraph. Sentences 4 and 5 explicitly refute the other choices.
8. **D.** The passage says that “for Whigs the *concept* of government was...” In other words, “the way Whigs thought about government was...” That process of thinking represents ideas, so choice D is the correct answer here.
9. **D.** This is supported by sentence 5 of the paragraph, which says that certain beliefs “particularly” reflected the views of northern Whigs. That suggests that Whigs in other regions of the country had beliefs that varied from this view and implies that such differences were regional. The other three choices are not mentioned in the passage in connection with “variations” in Whig beliefs, so there is no basis for inferring any of them.
10. **B.** Sentence 5 says that it was Whigs, not Democrats, who had the support of planters involved in international trade. The next sentence, sentence 6, says that in contrast, Democrats had the support of the groups mentioned in choices A, C, and D (“workers,” “entrepreneurs,” and certain other “individuals”). Therefore, all of the groups described in the answer choices, EXCEPT the planters of choice B, did support the Democrats.
11. **D.** The correct answer, choice D, describes Democrat strongholds first, and then Whig areas. No meaning has been changed, and no information has been left out.
12. **A.** The phrase “This new party” refers directly and only to the Whigs, who are first mentioned (as a recently formed party) in sentence 1 of this paragraph.
13. **AEF.** Choice B, “During Andrew Jackson’s two terms as President, he served as leader of both the Democratic and Whig Parties,” is incorrect because it contradicts the passage. Jackson was head of the Democratic Party. Choice C, “The Democratic Party primarily represented the interests of the market, banks, and commerce,” is incorrect because it is not true. The Whigs primarily represented these groups, as stated in paragraphs 3 and 6. Choice D, “In contrast to the Democrats, the Whigs favored government aid for education,” is incorrect because the passage states only that Whigs in the north were likely to favor aid to education. It is not clearly stated how other Whigs or Democrats felt on this issue.

**自我评价**

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**The Expression of Emotions**

Joy and sadness are experienced by people in all cultures around the world, but how can we tell when other people are happy or **despondent**? It turns out that the expression of many emotions may be universal. Smiling is apparently a universal sign of friendliness and approval. **Baring the teeth in a hostile way**, as noted by Charles Darwin in the nineteenth century, may be a universal sign of anger. As the originator of the theory of evolution, Darwin believed that the universal recognition of facial expressions would have survival value. For example, facial expressions could signal the approach of enemies (or friends) in the absence of language.

■ Most investigators **concur** that certain facial expressions suggest the same emotions in all people. ■ Moreover, people in diverse cultures recognize the emotions manifested by the facial expressions. ■ In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness, and sadness. ■ He then asked people around the world to indicate what emotions were being depicted in **them**. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. **The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in stories that called for basic emotional responses.** Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and which emotion was more intense.

Psychological researchers generally recognize that facial expressions reflect emotional states. In fact, various emotional states give rise to certain patterns of electrical activity in the facial muscles and in the brain. The facial-feedback hypothesis argues, however, that the causal relationship between emotions and facial expressions can also work in the opposite direction. According to this hypothesis, signals from the facial muscles ("feedback") are sent back to emotion centers of the brain, and so a person's facial expression can influence that person's emotional state. Consider Darwin's words: "The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as possible, of all outward signs softens our emotions." Can smiling give rise to feelings of good will, for example, and frowning to anger?

Psychological research has given rise to some interesting findings concerning the **facial-feedback hypothesis**. Causing participants in experiments to smile, for example, leads them to report more positive feelings and to **rate** cartoons (humorous drawings of people or situations) as being more humorous. When they are caused to frown, they rate cartoons as being more aggressive.

What are the possible links between facial expressions and emotion? One link is arousal, which is the level of activity or preparedness for activity in an organism. Intense contraction of facial muscles, such as those used in signifying fear, heightens arousal. Self-perception of heightened arousal then leads to heightened emotional activity. Other links may involve changes in brain temperature and the release of neurotransmitters (substances that transmit nerve impulses.) The contraction of facial muscles both influences the internal emotional state and reflects it. Ekman has found that the so-called Duchenne smile, which is characterized by "crow's feet" wrinkles around the eyes and a subtle drop in the eye cover fold so that the skin above the eye moves down slightly toward the eyeball, can lead to pleasant feelings.

Ekman's observation may be **relevant** to the British expression "keep a stiff upper lip" as a recommendation for handling stress. It might be that a "stiff" lip suppresses emotional response—as long as the lip is not quivering with fear or tension. But when the emotion that leads to stiffening the lip is more intense, and involves strong muscle tension, facial feedback may heighten emotional response.

1. The word **“despondent”** in the passage is closest in meaning to
  - (A) curious
  - (B) unhappy
  - (C) thoughtful
  - (D) uncertain
2. The author mentions **“Baring the teeth in a hostile way”** in order to
  - (A) Differentiate one possible meaning of a particular facial expression from other meanings of it
  - (B) Support Darwin’s theory of evolution
  - (C) Provide an example of a facial expression whose meaning is widely understood
  - (D) Contrast a facial expression that is easily understood with other facial expressions
3. The word **“concur”** in the passage is closest in meaning to
  - (A) estimate
  - (B) agree
  - (C) expect
  - (D) understand
4. The word **“them”** in the passage refers to
  - (A) emotions
  - (B) people
  - (C) photographs
  - (D) cultures
5. According to paragraph 2, which of the following was true of the Fore people of New Guinea?
  - (A) They did not want to be shown photographs.
  - (B) They were famous for their story-telling skills.
  - (C) They knew very little about Western culture.
  - (D) They did not encourage the expression of emotions.
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The Fore’s facial expressions indicated their unwillingness to pretend to be story characters.
  - (B) The Fore were asked to display familiar facial expressions when they told their stories.
  - (C) The Fore exhibited the same relationship of facial expressions and basic emotions that is seen in Western culture when they acted out stories.
  - (D) The Fore were familiar with the facial expressions and basic emotions of characters in stories.
7. According to the passage, what did Darwin believe would happen to human emotions that were not expressed?
  - (A) They would become less intense.
  - (B) They would last longer than usual.
  - (C) They would cause problems later.
  - (D) They would become more negative.
8. According to the passage, research involving which of the following supported the facial-feedback hypothesis?
  - (A) The reactions of people in experiments to cartoons
  - (B) The tendency of people in experiments to cooperate
  - (C) The release of neurotransmitters by people during experiments
  - (D) The long-term effects of repressing emotions
9. The word **“rate”** in the passage is closest in meaning to
  - (A) judge
  - (B) reject
  - (C) draw
  - (D) want
10. The word **“relevant”** in the passage is closest in meaning to
  - (A) contradictory

- (B) confusing
- (C) dependent
- (D) applicable

**11. According to the passage, stiffening the upper lip may have which of the following effects?**

- (A) It first suppresses stress, then intensifies it.
- (B) It may cause fear and tension in those who see it.
- (C) It can damage the lip muscles.
- (D) It may either heighten or reduce emotional response.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This universality in the recognition of emotions was demonstrated by using rather simple methods.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Psychological research seems to confirm that people associate particular facial expressions with the same emotions across cultures.

**Answer choices**

- (A) Artificially producing the Duchenne smile can cause a person to have pleasant feelings.
- (B) Facial expressions and emotional states interact with each other through a variety of feedback mechanisms.
- (C) People commonly believe that they can control their facial expressions so that their true emotions remain hidden.
- (D) A person's facial expression may reflect the person's emotional state.
- (E) Ekman argued that the ability to accurately recognize the emotional content of facial expressions was valuable for human beings.
- (F) Facial expressions that occur as a result of an individual's emotional state may themselves feedback information that influences the person's emotions.

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**参考答案与解析 (摘自 Official Guide)**

1. **B.** The sentence in which the highlighted word appears uses *despondent* as a contrast to happy. Since unhappy is the opposite of happy, it provides the fullest possible contrast and is equivalent to the contrast between Joy and sadness at the beginning of the sentence.
2. **C.** *Baring the teeth* is an example of a facial expression whose meaning is widely understood. The central theme of paragraph 1 of the passage is facial expressions that are universal. The author provides various examples of such expressions, and baring the teeth is mentioned as a universal sign of anger. The other choices are all mentioned in the passage, but not in conjunction with baring the teeth, so they are all incorrect.
3. **B.** *Concur* means to agree, so if investigators *concur* about the meaning of certain facial expressions, they agree on their meaning.
4. **C.** This is a simple pronoun-referent item. The word *them* refers to the photographs that Paul Eckman showed to people from diverse cultures, so the correct answer is choice C, "photographs."
5. **C.** The paragraph explicitly says that the Fore had almost no contact with Western culture. None of the other three choices is mentioned in connection with the Fore, so none of them is correct.
6. **C.** The sentence that precedes the highlighted sentence states that in a survey, the Fore agreed with Westerners on how various emotions are portrayed. Then the highlighted sentence says that in a different situation (story-telling) the Fores' expressions were also familiar; that is, these expressions were the same as those exhibited by Westerners in this situation. Choices A and B are incorrect because each one changes the highlighted sentence into a statement that is not true. Choice D is incorrect because it says that the Fore were familiar with the facial expressions of characters in stories. The highlighted sentence says that it was the investigators who were familiar with the Fores' expressions. This is a change in meaning, so it is incorrect.
7. **A.** This is correct based on the direct quotation of Darwin in paragraph 3. In that quotation, Darwin says that emotions that are freely expressed become more intense, while "on the other hand" those that are not freely expressed are "softened," meaning that they become less intense. Choices B, C, and D are all incorrect because there is nothing in the passage that indicates Darwin ever believed these things about expressing emotions. Some or all of them may actually be true, but there is nothing in this passage that supports them.
8. **A.** This idea is found in paragraph 4, which uses these experiments as an example of how *facial feedback* works. Answers, Explanations, and Listening Scripts Choice C, the release of neurotransmitters, is mentioned in paragraph 5 but not in connection with the facial-feedback hypothesis, so it is incorrect. Choices B and D are not explicitly mentioned at all in the passage.
9. **A.** *Rate* in this context means "to judge."
10. **D.** *Relevant* means that Ekman's observation applies ("is applicable") to an expression.
11. **D.** This is stated explicitly in paragraph 6 of the passage as a possible paradox in the relationship between facial expressions and emotions. Choice A is incorrect because paragraph 6 contradicts it. Choice B is incorrect because the passage mentions only the fear and tension of a person trying to keep a stiff upper lip, not any fear or tension that expression may cause in others. Choice C is incorrect because there is no suggestion anywhere in the passage that stiffening the upper lip may damage lip muscles.
12. **C.** Square C is correct because the inserted sentence begins with the phrase "This universality." The universality being referred to is the fact, stated in the second sentence, that "people in diverse cultures recognize the emotions manifested by the facial expressions." None of the other answer choices follows a sentence that contains a universal statement.
13. **BDF.** Choice A, "Artificially producing the Duchenne smile can cause a person to have pleasant feelings," is incorrect because it is a minor, supporting detail mentioned in paragraph 5 as an example of a more general, and important, statement about the links between facial expressions and emotion. Choice C, "People commonly believe that they can control their facial expressions so that their true emotions remain hidden," is incorrect because while it may be true, the passage does not make this claim. Choice E, "Ekman argued that the ability to accurately recognize the emotional content of facial expressions was valuable for human beings," is incorrect because according to the passage, Ekman did not make this argument; Charles Darwin did. Ekman's research was directed toward determining the universality of certain facial expressions, not the "value" of people's ability to recognize those expressions.



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Geology and Landscape**

Most people consider the landscape to be unchanging, but Earth is a dynamic body, and its surface is continually altering—slowly on the human time scale, but **relatively** rapidly when compared to the great age of Earth (about 4,500 billion years). There are two principal influences that shape the terrain: constructive processes such as uplift, which create new landscape features, and destructive forces such as erosion, which gradually wear away exposed landforms.

**Hills and mountains are often regarded as the epitome of permanence, successfully resisting the destructive forces of nature, but in fact they tend to be relatively short-lived in geological terms.** As a general rule, the higher a mountain is, the more recently it was formed; for example, the high mountains of the Himalayas are only about 50 million years old. Lower mountains tend to be older, and are often the eroded **relics** of much higher mountain chains. About 400 million years ago, when the present-day continents of North America and Europe were joined, the Caledonian mountain chain was the same size as the modern Himalayas. Today, however, the relics of the Caledonian orogeny (mountain-building period) exist as the comparatively low mountains of Greenland, the northern Appalachians in the United States, the Scottish Highlands, and the Norwegian coastal plateau.

The Earth's crust is thought to be divided into huge, movable segments, called plates, which float on a soft plastic layer of rock. Some mountains were formed as a result of these plates crashing into each other and forcing up the rock at the plate margins. In this process, sedimentary rocks that originally formed on the seabed may be folded upwards to altitudes of more than 26,000 feet. Other mountains may be raised by earthquakes, which fracture the Earth's crust and can displace enough rock to produce block mountains. A third type of mountain may be formed as a result of volcanic activity which occurs in regions of active fold mountain belts, such as in the Cascade Range of western North America. The Cascades are made up of lavas and volcanic materials. Many of the peaks are extinct volcanoes.

Whatever the reason for mountain formation, as soon as land rises above sea level it is subjected to destructive forces. The exposed rocks are attacked by the various weather processes and gradually broken down into fragments, which are then carried away and later deposited as sediments. Thus, any landscape represents only a temporary stage in the continuous battle between the forces of uplift and those of erosion.

The weather, in its many forms, is the main agent of erosion. Rain washes away loose soil and penetrates cracks in the rocks. **Carbon dioxide** in the air reacts with the rainwater, forming a weak acid (carbonic acid) that may chemically attack the rocks. The rain **seeps** underground and the water may reappear later as springs. These springs are the sources of streams and rivers, which cut through the rocks and carry away debris from the mountains to the lowlands.

Under very cold conditions, rocks can be shattered by ice and frost. Glaciers may form in permanently cold areas, and these slowly moving masses of ice cut out valleys, carrying with **them** huge quantities of eroded rock debris. ■ In dry areas the wind is the principal agent of erosion. ■ It carries fine particles of sand, which bombard exposed rock surfaces, thereby wearing them into yet more sand. ■ Even living things contribute to the formation of landscapes. ■ Tree roots force their way into cracks in rocks and, in so doing, speed their splitting. In contrast, the roots of grasses and other small plants may help to hold loose soil fragments together, thereby helping to prevent erosion by the wind.

1. **According to paragraph 1, which of the following statements is true of changes in Earth's landscape?**
  - (A) They occur more often by uplift than by erosion.
  - (B) They occur only at special times.
  - (C) They occur less frequently now than they once did.
  - (D) They occur quickly in geological terms.
2. **The word "relatively" in the passage is closest in meaning to**
  - (A) unusually
  - (B) comparatively
  - (C) occasionally
  - (D) naturally
3. **Which of the following can be inferred from paragraph 2 about the mountains of the Himalayas?**
  - (A) Their current height is not an indication of their age.
  - (B) At present, they are much higher than the mountains of the Caledonian range.
  - (C) They were a uniform height about 400 million years ago.
  - (D) They are not as high as the Caledonian mountains were 400 million years ago.
4. **The word "relics" in the passage is closest in meaning to**
  - (A) resemblances
  - (B) regions
  - (C) remains
  - (D) restorations
5. **According to paragraph 3, one cause of mountain formation is the**
  - (A) effect of climatic change on sea level
  - (B) slowing down of volcanic activity
  - (C) force of Earth's crustal plates hitting each other
  - (D) replacement of sedimentary rock with volcanic rock
6. **Why does the author mention "Carbon dioxide" in the passage?**
  - (A) To explain the origin of a chemical that can erode rocks
  - (B) To contrast carbon dioxide with carbonic acid
  - (C) To give an example of how rainwater penetrates soil
  - (D) To argue for the desirability of preventing erosion
7. **The word "seeps" in the passage is closest in meaning to**
  - (A) dries gradually
  - (B) flows slowly
  - (C) freezes quickly
  - (D) warms slightly
8. **The word "them" in the passage refers to**
  - (A) cold areas
  - (B) masses of ice
  - (C) valleys
  - (D) rock debris
9. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) When they are relatively young, hills and mountains successfully resist the destructive forces of nature.
  - (B) Although they seem permanent, hills and mountains exist for a relatively short period of geological time.
  - (C) Hills and mountains successfully resist the destructive forces of nature, but only for a short time.
  - (D) Hills and mountains resist the destructive forces of nature better than other types of landforms.
10. **According to paragraph 6, which of the following is both a cause and result of erosion?**
  - (A) glacial activity
  - (B) rock debris

- (C) tree roots
- (D) sand

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Under different climatic conditions, another type of destructive force contributes to erosion.

**Where would the sentence best fit?**

**12. Directions:** Three of the answer choices below are used in the passage to illustrate constructive processes and two are used to illustrate destructive processes. Complete the table by matching appropriate answer choices to the processes they are used to illustrate. This question is worth 3 points.

Constructive Processes (THREE):
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Destructive Processes (TWO):
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**Answer choices**

- (A) Collision of Earth's crustal plates
- (B) Separation of continents
- (C) Wind-driven sand
- (D) Formation of grass roots in soil
- (E) Earthquakes
- (F) Volcanic activity
- (G) Weather processes

**笔记区**

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**参考答案与解析 (摘自 Official Guide)**

1. **D.** This is a Factual Information question asking for specific information that can be found in paragraph 1. Sentence 1 of the paragraph explicitly states that Earth's landscape changes relatively rapidly compared to Earth's overall age. Choice A, on the frequency of landscape changes, is contradicted by the paragraph. Choice B, that landscape changes occur only at special times, is also contradicted by the paragraph. Choice C, the frequency of landscape changes, is not mentioned.
2. **B.** This is a Vocabulary question. The sentence in which *relatively* appears is comparing Earth's time scale to the human time scale, so "comparatively" is the correct answer.
3. **B.** This is an Inference question asking for an inference that can be supported by paragraph 2. The Himalayas are higher than the Caledonian mountains. The paragraph states that younger mountains are general & higher than older mountains. It also states that the Himalayas are much younger than the Caledonians. Since the Himalayas are the younger range and Lounger mountain ranges are higher than older ranges, we can infer that the younger Himalayas are higher than the older Caledonians. Choices A and D are incorrect because that explicitly contradict the passage. The height of the Himalayas is an indication of their age, and the Himalayas are about the same height that the Caledonians were 400 million years ago. Choice C is incorrect because nothing there is nothing in the paragraph about "uniform height".
4. **C.** This is a Vocabulary question. The *relics* of the Caledonian range are what is left of them. "Remains" means what is left of something, so it is the correct answer.
5. **C.** This is a Factual Information question asking for specific information that can be found in paragraph 3. Mountains are formed by crustal plates hitting each other. The paragraph states that mountains are formed in three ways: by, crustal plates hitting each other, by earthquakes, and by volcanoes. Choices A, B, and D are not among these causes of mountain formation, so they are therefore incorrect.
6. **A.** This is a Rhetorical Purpose question. *Carbon dioxide* is mentioned to explain the origin of a chemical that can erode rocks. The author is describing a particular cause of erosion, and the starting point of that process is carbon dioxide.
7. **B.** This is a Vocabulary question. The sentence is describing the way in which rain moves underground from Earth's surface. It cannot do this by "drying" (Choice A), "freezing" (Choice C), or "warming" (Choice D).
8. **B.** This is a Reference question. This is a simple pronoun-referent item. The word *them* refers to the glaciers that are carrying eroded rock. Notice that in this case, a whole series of words separates the pronoun from its referent.
9. **B.** That choice contains all of the essential information in the highlighted sentence. It omits the information in the second clause of the highlighted sentence ("successfully resisting the destructive forces of nature") because that information is not essential to the meaning. Choice A adds information on the age of a mountain that is not mentioned in the highlighted sentence. Choice C introduces information about how long mountains resist forces of nature in absolute terms; the highlighted sentence says that the resistance is relatively short in geological terms, which is an entirely different meaning. Choice D compares mountains to other land forms. The highlighted sentence does not make any such comparison.
10. **D.** This is a Factual Information question asking for specific information that can be found in paragraph 6. Sentences 3 and 4 of that paragraph describe erosion in dry areas. Sand is carried by wind and bombards rock; this bombardment breaks down the rock, and, as a result, more sand is created. Thus sand is both the cause and the result of erosion, so Choice D is correct. Glacial activity (Choice A) and tree roots (Choice C) are both mentioned only as causes of erosion. Rock debris (Choice B) is mentioned only as a result of erosion.
11. **A.** Square A is correct because the inserted sentence is a transitional sentence, moving the discussion away from one set of climatic conditions (cold) to another set of climatic conditions (dryness). It is at square A that the transition between topics takes place. Squares B, C, and D all precede sentences that provide details of dry climatic conditions. No transition is taking place at any of those places, so the inserted sentence is not needed.
12. **Constructive processes: AEF; destructive processes: CG.** Choice B: "Separation of continents" does not belong in the table because it not mentioned in the passage as either a constructive or destructive process. Choice D: "Formation of grass roots in soil" does not belong in the table because it not mentioned in the passage as either a constructive or destructive process.

**TOEFL Official Guide Practice Test 2****自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Feeding Habits of East African Herbivores**

Buffalo, zebras, wildebeests, topi, and Thomson's gazelles live in huge groups that together make up some 90 percent of the total weight of mammals living on the Serengeti Plain of East Africa. They are all herbivores (plant-eating animals), and they all appear to be living on the same diet of grasses, herbs, and small bushes. This appearance, however, is **illusory**. When biologist Richard Bell and his colleagues analyzed the stomach contents of four of the five species (they did not study buffalo), they found that each species was living on a different part of the vegetation. The different vegetational parts differ in their food qualities: lower down, there are succulent, nutritious leaves; higher up are the harder stems. There are also **sparsely** distributed, highly nutritious fruits, and Bell found that only the Thomson's gazelles eat much of these. The other three species differ in the proportion of lower leaves and higher stems that they eat: zebras eat the most stem matter, wildebeests eat the most leaves, and topi are intermediate.

How are we to understand their different feeding preferences? The answer lies in two **associated** differences among the species, in their digestive systems and body sizes. According to their digestive systems, these herbivores can be divided into two categories: the nonruminants (such as the zebra, which has a digestive system like a horse) and the ruminants (such as the wildebeest, topi, and gazelle, which are like the cow). Nonruminants cannot extract much energy from the hard parts of a plant; however, this is more than made up for by the fast speed at which food passes through their guts. Thus, when there is only a short supply of poor-quality food, the wildebeest, topi, and gazelle enjoy an advantage. They are ruminants and have a special structure (the rumen) in their stomachs, which contains microorganisms that can break down the hard parts of plants. Food passes only slowly through the ruminant's gut because ruminating—digesting the hard parts—takes time. The ruminant continually regurgitates food from its stomach back to its mouth to chew it up further (that is what a cow is doing when "chewing cud"). Only when it has been chewed up and digested almost to a liquid can the food pass through the rumen and on through the gut. Larger particles cannot pass through until they have been chewed down to size. Therefore, when food is in short supply, a ruminant can last longer than a nonruminant because it can derive more energy out of the same food. The difference can partially explain the eating habits of the Serengeti herbivores. The zebra chooses areas where there is more low-quality food. It migrates first to unexploited areas and chomps the abundant low-quality stems before moving on. It is a fast-in/fast-out feeder, relying on a high output of incompletely digested food. By the time the wildebeests (and other ruminants) arrive, the grazing and trampling of the zebras will have worn the vegetation down. As the ruminants then set to work, they eat down to the lower, leafier parts of the vegetation. All of this fits in with the differences in stomach contents with which we began.

The other part of the explanation is body size. Larger animals require more food than smaller animals, but smaller animals have a higher metabolic rate. Smaller animals can therefore live where there is less food, **provided that** such food is of high energy content. That is why the smallest of the herbivores, Thomson's gazelle, lives on fruit that is very nutritious but too thin on the ground to support a larger animal. By contrast, the large zebra lives on the masses of low-quality stem material.

The differences in feeding preferences lead, in turn, to differences in migratory habits. ■ The wildebeests follow, in their migration, the pattern of local rainfall. ■ The other species do likewise. ■ But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. ■ The larger, less **fastidious** feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.

1. The word “**illusory**” in the passage is closest in meaning to
  - (A) definite
  - (B) illuminating
  - (C) misleading
  - (D) exceptional
2. The word “**sparsely**” in the passage is closest in meaning to
  - (A) widely
  - (B) thinly
  - (C) clearly
  - (D) freshly
3. Which of the following questions about Richard Bell’s research is NOT answered in paragraph 1?
  - (A) Which of the herbivores studied is the only one to eat much fruit?
  - (B) Which part of the plants do wildebeests prefer to eat?
  - (C) Where did the study of herbivores’ eating habits take place?
  - (D) Why were buffalo excluded from the research study?
4. The word “**associated**” in the passage is closest in meaning to
  - (A) obvious
  - (B) significant
  - (C) expected
  - (D) connected
5. The author mentions the cow and the horse in paragraph 2 in order to
  - (A) Distinguish the functioning of their digestive systems from those of East African animals
  - (B) Emphasize that their relatively large body size leads them to have feeding practices similar to those of East African mammals
  - (C) Illustrate differences between ruminants and nonruminants through the use of animals likely to be familiar to most readers
  - (D) Emphasize similarities between the diets of cows and horses and the diets of East African mammals
6. According to paragraph 2, which of the following herbivores has to eat large quantities of plant stems because it gains relatively little energy from each given quantity of this food?
  - (A) The gazelle
  - (B) The wildebeest
  - (C) The zebra
  - (D) The topi
7. Paragraph 2 suggests that which of the following is one of the most important factors in determining differences in feeding preferences of East African herbivores?
  - (A) The availability of certain foods
  - (B) The differences in stomach structure
  - (C) The physical nature of vegetation in the environment
  - (D) The ability to migrate when food supplies are low
8. According to paragraph 2, all of the following are true of East African gazelles EXCEPT
  - (A) They digest their food very quickly.
  - (B) Microorganisms help them digest their food.
  - (C) They are unable to digest large food particles unless these are chewed down considerably.
  - (D) They survive well even if food supplies are not abundant.
9. The phrase “**provided that**” in the passage is closest in meaning to
  - (A) as long as
  - (B) unless
  - (C) as if
  - (D) even though
10. The word “**fastidious**” in the passage is closest in meaning to
  - (A) rapid
  - (B) determined

- (C) flexible
- (D) demanding

**11. According to paragraph 4, which of the following mammals exhibits a feeding behavior that is beneficial to the other herbivores that share the same habitat?**

- (A) Topi
- (B) Zebra
- (C) Wildebeest
- (D) Gazelle

**12. According to the passage, which of the following is true of wildebeests?**

- (A) They eat more stem matter than zebras do.
- (B) They are able to digest large food particles if the food is of a high quality.
- (C) They tend to choose feeding areas in which the vegetation has been worn down.
- (D) They are likely to choose low-quality food to eat in periods when the quantity of rainfall is low.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The sequence in which they migrate correlates with their body size.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

East African herbivores, though they all live in the same environment, have a range of feeding preferences.

**Answer choices**

- (A) The survival of East African mammals depends more than anything else on the quantity of highly nutritious fruits that they are able to find.
- (B) A herbivore's size and metabolic rate affect the kinds of food and the quantities of food it needs to eat.
- (C) Zebras and wildebeests rarely compete for the same food resources in the same locations.
- (D) The different digestive systems of herbivores explain their feeding preferences.
- (E) Migratory habits are influenced by feeding preferences.
- (F) Patterns in the migratory habits of East African herbivores are hard to establish.

## 笔记区

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**参考答案与解析 (摘自 Official Guide)**

1. **C.** The idea that all East African herbivores have the same diet is false, or misleading.
2. **B.** Highly nutritious fruits can be found only in small quantities and in few areas, so we say that they are thinly distributed.
3. **D.** While the text states clearly that buffalo were not studied, it never states why they were not studied. The text provides the answer to the question in choice A by stating that Thomson's gazelles eat a large amount of fruit. The text provides the answer to the question in choice B by stating that wildebeests prefer to eat leaves. The text provides the answer to the question in choice C by indicating that the study took place on the Serengeti Plain in East Africa.
4. **D.** In other words, the differences between the species are related, or connected.
5. **C.** Cows and horses are animals that are familiar to most people, so they are a useful reference point for the reader to understand the types of animals that are ruminants and nonruminants.
6. **C.** The paragraph describes in detail the large amount of low-quality stems that zebras eat. The gazelle, wildebeest, and topi given in choices A, B, and D, respectively, are all ruminants. The paragraph states specifically that ruminants are able to derive a large amount of energy from a given quantity of food, unlike nonruminants such as zebras.
7. **B.** Paragraph 2 is devoted to discussing the differences in feeding preferences that result from the different digestive systems, and therefore different stomach structures, of ruminants and nonruminants. The factors given in choices A, C, and D are all mentioned in paragraph 2, but they are more indirectly and occasionally related to feeding preferences, whereas the differences in stomach structures are shown in the paragraph to always be the primary factor in feeding preferences.
8. **A.** The paragraph states that gazelles are ruminants and that it "takes time" for ruminants to digest their food. Therefore it is incorrect to say that gazelles digest their food quickly. The information given in choices B, C, and D is stated in the paragraph as facts about ruminants.
9. **A.** In other words, small animals can live with less food as long as, or if, that food has enough energy.
10. **D.** In other words, zebras are not very demanding or particular feeders.
11. **B.** The paragraph states that zebras arrive first at a given habitat and "The later species all depend on the preparations of" the zebra. According to sentences 4 and 5, the topi, wildebeest, and gazelle given in choices A, C, and D, respectively, all arrive at a given habitat after the zebra and therefore benefit from the results of the zebra's actions on the vegetation of the habitat.
12. **C.** Paragraph 2 states that zebras wear down the vegetation in a given habitat, and then ruminants, such as wildebeests, arrive to feed on the remaining, lower, leafier vegetation. Paragraph 1 supports this idea by stating that wildebeests prefer to eat lower leaves. Choice A is contradicted in several places: paragraphs 1 and 2 each state that zebras eat stems, and wildebeests eat leaves. Choice B is contradicted in paragraph 2, which states that large food particles simply cannot pass through the digestive system of ruminants such as wildebeests. Choice D is contradicted in paragraph 2, which states that ruminants such as wildebeests do not have to resort to eating low-quality food because they can derive energy from the same quantity of food for a long time.
13. **D.** Square D is correct because the phrase "The sequence" refers to the set order in which mammals migrate, which is mentioned in the sentence preceding square D. Furthermore, the phrase "correlates with their body size" prepares the reader for the discussion of the larger, smaller, and smallest animals mentioned in the sentence following square D. Squares A, B, and C are incorrect because none of the preceding or following sentences makes a clear reference to a sequence or to body size.
14. **BDE.** Choice A, "The survival of East African mammals depends more than anything else on the quantity of highly nutritious fruits that they are able to find," is incorrect according to the passage. Paragraph 1 states that only Thomson's gazelles eat fruit. Other East African mammals discussed in the passage eat only stems and leaves. Choice C, "Zebras and wildebeests rarely compete for the same food resources in the same locations," is incorrect because it is a minor idea in the passage. The feeding habits of zebras and wildebeests are discussed in the passage as specific examples of the larger ideas given in choices B, D, and E. Choice F, "Patterns in the migratory habits of East African herbivores are hard to establish," is contradicted by the passage. Paragraph 4 states that species follow the pattern of local rainfall in their migrations.



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Loie Fuller**

The United States dancer Loie Fuller (1862–1928) found theatrical dance in the late nineteenth century artistically unfulfilling. She considered herself an artist rather than a mere entertainer, and she, in turn, attracted the notice of other artists.

Fuller devised a type of dance that focused on the shifting play of lights and colors on the voluminous skirts or draperies she wore, which she kept in constant motion principally through movements of her arms, sometimes extended with wands concealed under her costumes. She rejected the technical virtuosity of movement in ballet, the most prestigious form of theatrical dance at that time, perhaps because her formal dance training was minimal. **Although her early theatrical career had included stints as an actress, she was not primarily interested in storytelling or expressing emotions through dance; the drama of her dancing emanated from her visual effects.**

Although she discovered and introduced her art in the United States, she achieved her greatest glory in Paris, where she was engaged by the Folies Bergère in 1892 and soon became “La Loie,” the darling of Parisian audiences. Many of her dances represented elements or natural objects—Fire, the Lily, the Butterfly, and so on—and thus accorded well with the fashionable Art Nouveau style, which emphasized nature imagery and fluid, sinuous lines. Her dancing also attracted the attention of French poets and painters of the period, for it appealed to their liking for mystery, their belief in art for art’s sake, a nineteenth-century idea that art is valuable in itself rather than because it may have some moral or educational benefit, and their efforts to synthesize form and content.

Fuller had scientific leanings and constantly experimented with electrical lighting (which was then in its infancy), colored gels, slide projections, and other aspects of stage technology. She invented and patented special arrangements of mirrors and concocted chemical dyes for her draperies. Her interest in color and light paralleled the research of several artists of the period, notably the painter Seurat, famed for his Pointillist technique of creating a sense of shapes and light on canvas by applying extremely small dots of color rather than by painting lines. One of Fuller’s major inventions was underlighting, in which she stood on a pane of frosted glass illuminated from underneath. This was particularly effective in her *Fire Dance* (1895), performed to the music of Richard Wagner’s “Ride of the Valkyries.” The dance caught the eye of artist Henri de Toulouse-Lautrec, who depicted it in a lithograph.

As her technological expertise grew more sophisticated, so did the other aspects of her dances. ■ Although she gave little thought to music in her earliest dances, she later used scores by Gluck, Beethoven, Schubert, Chopin, and Wagner, eventually graduating to Stravinsky, Fauré, Debussy, and Mussorgsky, composers who were then considered progressive. ■ She began to address more ambitious themes in her dances such as *The Sea*, in which her dancers invisibly agitated a huge expanse of silk, played upon by colored lights. ■ Always open to scientific and technological innovations, she befriended the scientists Marie and Pierre Curie upon their discovery of radium and created a *Radium Dance*, which simulated the phosphorescence of that element. ■ She both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.

At the Paris Exposition in 1900, she had her own theater, where, in addition to her own dances, she presented pantomimes by the Japanese actress Sada Yocco. She assembled an all-female company at this time and established a school around 1908, but neither survived her. Although she is remembered today chiefly for her innovations in stage lighting, her activities also touched Isadora Duncan and Ruth St. Denis, two other United States dancers who were experimenting with new types of dance. She sponsored Duncan’s first appearance in Europe. Her theater at the Paris Exposition was visited by St. Denis, who found new ideas about stagecraft in Fuller’s work and fresh sources for her art in Sada Yocco’s plays. In 1924 St. Denis paid tribute to Fuller with the duet *Valse à la Loie*.

1. **What can be inferred from paragraph 1 about theatrical dance in the late nineteenth century?**
  - (A) It influenced many artists outside of the field of dance.
  - (B) It was very similar to theatrical dance of the early nineteenth century.
  - (C) It was more a form of entertainment than a form of serious art.
  - (D) It was a relatively new art form in the United States.
2. **According to paragraph 2, all of the following are characteristic of Fuller's type of dance EXCEPT**
  - (A) experimentation using color
  - (B) large and full costumes
  - (C) continuous movement of her costumes
  - (D) technical virtuosity of movement
3. **The word "prestigious" in the passage is closest in meaning to**
  - (A) highly regarded
  - (B) financially rewarding
  - (C) demanding
  - (D) serious
4. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Fuller was more interested in dance's visual impact than in its narrative or emotional possibilities.
  - (B) Fuller used visual effects to dramatize the stories and emotions expressed in her work.
  - (C) Fuller believed that the drama of her dancing sprang from her emotional style of storytelling.
  - (D) Fuller's focus on the visual effects of dance resulted from her early theatrical training as an actress.
5. **The word "engaged" in the passage is closest in meaning to**
  - (A) noticed
  - (B) praised
  - (C) hired
  - (D) attracted
6. **The word "synthesize" in the passage is closest in meaning to**
  - (A) improve
  - (B) define
  - (C) simplify
  - (D) integrate
7. **According to paragraph 3, why was Fuller's work well received in Paris?**
  - (A) Parisian audiences were particularly interested in artists and artistic movements from the United States.
  - (B) Influential poets tried to interest dancers in Fuller's work when she arrived in Paris.
  - (C) Fuller's work at this time borrowed directly from French artists working in other media.
  - (D) Fuller's dances were in harmony with the artistic values already present in Paris.
8. **According to paragraph 4, Fuller's *Fire Dance* was notable in part for its**
  - (A) use of colored gels to illuminate glass
  - (B) use of dyes and paints to create an image of fire
  - (C) technique of lighting the dancer from beneath
  - (D) draperies with small dots resembling the Pointillist technique of Seurat
9. **Why does the author mention Fuller's *The Sea*?**
  - (A) To point out a dance of Fuller's in which music did not play an important role
  - (B) To explain why Fuller sometimes used music by progressive composers
  - (C) To illustrate a particular way in which Fuller developed as an artist
  - (D) To illustrate how Fuller's interest in science was reflected in her work
10. **The word "agitated" in the passage is closest in meaning to**
  - (A) emerged from beneath
  - (B) created movement in
  - (C) arranged themselves in

(D) pretended to be

**11. According to paragraph 6, what was true of Fuller's theater at the Paris Exposition?**

- (A) It presented some works that were not by Fuller.
- (B) It featured performances by prominent male as well as female dancers.
- (C) It became a famous school that is still named in honor of Fuller.
- (D) It continued to operate as a theater after Fuller died.

**12. The passage mentions which of the following as a dance of Fuller's that was set to music?**

- (A) *Fire Dance*
- (B) *Radium Dance*
- (C) *Le Lys de la Vie*
- (D) *Valse à la Loie*

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

For all her originality in dance, her interests expanded beyond it into newly emerging artistic media.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Loie Fuller was an important and innovative dancer.

**Answer choices**

- (A) Fuller believed that audiences in the late nineteenth century had lost interest in most theatrical dance.
- (B) Fuller transformed dance in part by creating dance interpretations of works by poets and painters.
- (C) Fuller's work influenced a number of other dancers who were interested in experimental dance.
- (D) Fuller introduced many technical innovations to the staging of theatrical dance.
- (E) Fuller continued to develop throughout her career, creating more complex works and exploring new artistic media.
- (F) By the 1920's, Fuller's theater at the Paris Exhibition had become the world center for innovative dance.

**笔记区**

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**参考答案与解析 (摘自 Official Guide)**

1. **C.** Choice A is incorrect because we know only that other artists were attracted to Loie Fuller as an artist; there is no information about what fields these artists were in or if their work was actually influenced by Loie Fuller. Choice B is incorrect because there is no information about theatrical dance in the early nineteenth century. Choice D is incorrect because there is no indication in the paragraph about the length of time theatrical dance had been practiced.
2. **D.** Sentence 2 in the paragraph states that Loie Fuller rejected technical virtuosity, so it cannot be a characteristic of her type of dance. The information in choices A, B, and C is stated in sentence 1 as part of her type of dance.
3. **A.** According to the paragraph, ballet was a distinguished, or highly regarded, dance form.
4. **A.** Choices B and C are incorrect because the highlighted sentence states that Fuller was not interested in storytelling, so to say that she dramatized stories or had a particular style of storytelling is incorrect. Choice D is incorrect because the highlighted sentence indicates the opposite idea: it indicates that Fuller's early career had little effect on her style of dance.
5. **C.** Fuller began to work for the Folies Bergère.
6. **D.** According to the passage, French poets and painters wanted to blend, or integrate, form and content.
7. **D.** Choice A is incorrect because the paragraph says only that Parisian audiences liked Fuller's work; artists and artistic movements from the United States, in general, are not mentioned in this paragraph. Choice B is incorrect because the paragraph states that poets themselves were interested in Fuller's work. It does not state that poets tried to make other people interested in her work. Choice C is incorrect because the paragraph states in the first sentence that Fuller discovered and introduced her ideas herself; she did not borrow or take them from other artists.
8. **C.** Choices A, B, and D are incorrect because they inaccurately describe how certain techniques were used by Fuller. Furthermore, none of these techniques is mentioned in connection with Fuller's *Fire Dance*.
9. **C.** Choices A and B are incorrect because *The Sea* is not mentioned in connection with the use of music. Choice D is incorrect because *The Sea* is not mentioned in connection with science. The paragraph states that science is the theme of a different dance by Fuller, the *Radium Dance*.
10. **B.** According to the paragraph, Fuller's dancers made a large piece of silk move.
11. **A.** Choice B is incorrect because the paragraph states that Fuller created an all-female dance company at the time of the Paris Exposition, but we do not know if that company, or any particular company, performed in Fuller's theater. Choice C is incorrect because the paragraph states only that she established a school in 1908; we do not know that the school directly resulted from the Paris Exposition. Furthermore, we do not know from the paragraph that a school exists today that is named after Fuller. Choice D is incorrect because the paragraph does not state that Fuller's theater continued to operate after the Paris Exposition ended.
12. **A.** The works given in choices B, C, and D are all mentioned in the passage, but only choice B, *Radium Dance*, is a work by Fuller.
13. **D.** The "newly emerging artistic media" are elaborated on with the information about films in the sentence following square D.
14. **CDE.** Choice A, "Fuller believed that audiences in the late nineteenth century had lost interest in most theatrical dance," is incorrect because, while it could be true, the passage never makes this claim. The passage suggests only that Fuller lost interest in theatrical dance. Choice B, "Fuller transformed dance in part by creating dance interpretations of works by poets and painters," is incorrect because the passage does not state that Fuller based her dances on the works of other artists. The passage states several times that Fuller's work was entirely original: she developed her own work and, in fact, invented many techniques. Choice F, "By the 1920s, Fuller's theater at the Paris Exposition had become the world center for innovative dance," is incorrect because Fuller's theater existed for only one year, the year of the Paris Exposition (1900). Furthermore, the passage makes no claim about any particular place as being the "center for innovative dance."

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Green Icebergs**

Icebergs are massive blocks of ice, irregular in shape; they float with only about 12 percent of their mass above the sea surface. They are formed by glaciers—large rivers of ice that begin inland in the snows of Greenland, Antarctica, and Alaska—and move slowly toward the sea. The forward movement, the melting at the base of the glacier where it meets the ocean, and waves and tidal action cause blocks of ice to break off and float out to sea.

Icebergs are ordinarily blue to white, although they sometimes appear dark or opaque because they carry gravel and bits of rock. They may change color with changing light conditions and cloud cover, glowing pink or gold in the morning or evening light, but this color change is generally related to the low angle of the Sun above the horizon. ■ However, travelers to Antarctica have repeatedly reported seeing green icebergs in the Weddell Sea and, more commonly, close to the Amery Ice Shelf in East Antarctica. ■

**One explanation for green icebergs attributes their color to an optical illusion when blue ice is illuminated by a near-horizon red Sun, but green icebergs stand out among white and blue icebergs under a great variety of light conditions.** ■ Another suggestion is that the color might be related to ice with high levels of metallic compounds, including copper and iron. ■ Recent expeditions have taken ice samples from green icebergs and ice cores—vertical, cylindrical ice samples reaching down to great depths—from the glacial ice shelves along the Antarctic continent. Analyses of these cores and samples provide a different solution to the problem.

The ice shelf cores, with a total length of 215 meters (705 feet), were long enough to **penetrate** through glacial ice—which is formed from the compaction of snow and contains air bubbles—and to continue into the clear, bubble-free ice formed from seawater that freezes onto the bottom of the glacial ice. The properties of this clear sea ice were very similar to the ice from the green iceberg. The scientists concluded that green icebergs form when a two-layer block of shelf ice breaks away and capsizes (turns upside down), exposing the bubble-free shelf ice that was formed from seawater.

A green iceberg that stranded just west of the Amery Ice Shelf showed two distinct layers: bubbly blue-white ice and bubble-free green ice separated by a one-meter-long ice layer containing sediments. **The green ice portion was textured by seawater erosion.** Where cracks were present, the color was light green because of light scattering; where no cracks were present, the color was dark green. No air bubbles were present in the green ice, suggesting that the ice was not formed from the compression of snow but instead from the freezing of seawater. Large concentrations of single-celled organisms with green pigments (coloring substances) occur along the edges of the ice shelves in this region, and the seawater is rich in their decomposing organic material. The green iceberg did not contain large amounts of particles from these organisms, but the ice had **accumulated** dissolved organic matter from the seawater. It appears that unlike salt, dissolved organic substances are not **excluded** from the ice in the freezing process. Analysis shows that the dissolved organic material absorbs enough blue wavelengths from solar light to make the ice appear green.

Chemical evidence shows that platelets (minute flat portions) of ice form in the water and then **accrete** and stick to the bottom of the ice shelf to form a slush (partially melted snow). The slush is compacted by an unknown mechanism, and solid, bubble-free ice is formed from water high in soluble organic substances. When an iceberg separates from the ice shelf and capsizes, the green ice is exposed.

The Amery Ice Shelf appears to be uniquely suited to the production of green icebergs. Once detached from the ice shelf, these bergs drift in the currents and wind systems surrounding Antarctica and can be found scattered among Antarctica's less colorful icebergs.

1. **According to paragraph 1, all of the following are true of icebergs EXCEPT**
  - (A) They do not have a regular shape.
  - (B) They are formed where glaciers meet the ocean.
  - (C) Most of their mass is above the sea surface.
  - (D) Waves and tides cause them to break off glaciers.
2. **According to paragraph 2, what causes icebergs to sometimes appear dark or opaque?**
  - (A) A heavy cloud cover
  - (B) The presence of gravel or bits of rock
  - (C) The low angle of the Sun above the horizon
  - (D) The presence of large cracks in their surface
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) One explanation notes that green icebergs stand out among other icebergs under a great variety of light conditions, but this is attributed to an optical illusion.
  - (B) One explanation for the color of green icebergs attributes their color to an optical illusion that occurs when the light from a near-horizon red Sun shines on a blue iceberg.
  - (C) One explanation for green icebergs attributes their color to a great variety of light conditions, but green icebergs stand out best among other icebergs when illuminated by a near-horizon red Sun.
  - (D) One explanation attributes the color of green icebergs to an optical illusion under special light conditions, but green icebergs appear distinct from other icebergs under a great variety of light conditions.
4. **The word “penetrate” in the passage is closest in meaning to**
  - (A) collect
  - (B) pierce
  - (C) melt
  - (D) endure
5. **According to paragraph 4, how is glacial ice formed?**
  - (A) By the compaction of snow
  - (B) By the freezing of seawater on the bottom of ice shelves
  - (C) By breaking away from the ice shelf
  - (D) By the capsizing of a two-layer block of shelf ice
6. **According to paragraph 4, ice shelf cores helped scientists explain the formation of green icebergs by showing that**
  - (A) The ice at the bottom of green icebergs is bubble-free ice formed from frozen seawater
  - (B) Bubble-free ice is found at the top of the ice shelf
  - (C) Glacial ice is lighter and floats better than sea ice
  - (D) The clear sea ice at the bottom of the ice shelf is similar to ice from a green iceberg
7. **Why does the author mention that “The green ice portion was textured by seawater erosion”?**
  - (A) To explain why cracks in the iceberg appeared light green instead of dark green
  - (B) To suggest that green ice is more easily eroded by seawater than white ice is
  - (C) To support the idea that the green ice had been the bottom layer before capsizing
  - (D) To explain how the air bubbles had been removed from the green ice
8. **The word “accumulated” in the passage is closest in meaning to**
  - (A) collected
  - (B) frozen
  - (C) released
  - (D) covered
9. **The word “excluded” in the passage is closest in meaning to**
  - (A) kept out
  - (B) compressed
  - (C) damaged

(D) gathered together

**10. The word “accrete” in the passage is closest in meaning to**

- (A) advance
- (B) transfer
- (C) flatten out
- (D) come together

**11. Which of the following is NOT explained in the passage?**

- (A) Why blocks of ice break off where glaciers meet the ocean?
- (B) Why blocks of shelf ice sometimes capsize after breaking off?
- (C) Why green icebergs are commonly produced in some parts of Antarctica?
- (D) Why green icebergs contain large amounts of dissolved organic pigments?

**12. The passage supports which of the following statements about the Amery Ice Shelf?**

- (A) The Amery Ice Shelf produces only green icebergs.
- (B) The Amery Ice Shelf produces green icebergs because its ice contains high levels of metallic compounds such as copper and iron.
- (C) The Amery Ice Shelf produces green icebergs because the seawater is rich in a particular kind of soluble organic material.
- (D) No green icebergs are found far from the Amery Ice Shelf.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Scientists have differed as to whether icebergs appear green as a result of light conditions or because of something in the ice itself.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Several suggestions, ranging from light conditions to the presence of metallic compounds, have been offered to explain why some icebergs appear green.

**Answer choices**

- (A) Ice cores were used to determine that green icebergs were formed from the compaction of metallic compounds, including copper and iron.
- (B) All ice shelves can produce green icebergs, but the Amery Ice Shelf is especially well suited to do so.
- (C) Green icebergs form when a two layer block of ice breaks away from a glacier and capsizes, exposing the bottom sea ice to view.
- (D) Ice cores and samples revealed that both ice shelves and green icebergs contain a layer of bubbly glacial ice and a layer of bubble-free sea ice.
- (E) Green icebergs are white until they come into contact with seawater containing platelets and soluble organic green pigments.
- (F) In a green iceberg, the sea ice contains large concentrations of organic matter from the seawater.

**笔记区**

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**参考答案与解析 (摘自 Official Guide)**

1. **C.** The information in choice C is contradicted in sentence 1, which states that icebergs “float with only about 12 percent of their mass above the sea surface.”
2. **B.** Choice A is incorrect because, as sentence 2 states, cloud cover may result in “pink or gold” colors, not dark colors. Choice C is incorrect because “the low angle of the Sun above the horizon” is discussed as a possible cause of pink or gold colors. Choice D is incorrect because the issue of large cracks in icebergs is not discussed in paragraph 2.
3. **D.** Choice A is incorrect because it confuses the evidence against the theory with the theory itself. Choice B correctly explains the theory but leaves out the essential information of the evidence against the theory. Choice C is incorrect because it misrepresents the theory by, saying that the green color occurs in a wide variety of light conditions, whereas the highlighted sentence says that it occurs in a very specific light condition—“a near-horizon red Sun.”
4. **B.** Ice shelf cores were long enough to pierce through glacial ice.
5. **A.** Choice B is incorrect because the information given describes sea ice, a different type of ice. Choice C is incorrect because the information given describes the first step in the formation of green icebergs. Choice D is incorrect because the information given describes the second step in the formation of green icebergs.
6. **D.** Sentence 2 in the paragraph states that clear sea ice is “very similar” to the ice from green icebergs. Choices 1, 2, and 3 do not answer the question asked.
7. **C.** Choice A is incorrect because the information given, while factual according to the passage, does not explain why the author includes the information that the green ice portion was textured by seawater. Choice B is incorrect because there is no comparison made between the erosion of green ice and white ice in the paragraph. Choice D is incorrect because, while sentences 1 and 4 in the paragraph state that green ice has no bubbles, there is no information in the paragraph indicating that green ice initially has bubbles and that they are removed.
8. **A.** The ice gradually collected, or built up, dissolved organic matter.
9. **A.** Dissolved organic substances are not kept out of the ice in the freezing process.
10. **D.** Platelets of ice gather on the bottom of the ice shelf.
11. **B.** The last sentence of paragraph 4 states that green icebergs capsize, but it does not state why. The information in choice A is presented in the last sentence of paragraph 1. The information in choice C is presented in paragraph 7, which says that the Amery Ice Shelf in Antarctica is “uniquely suited to the production of green icebergs.” The information in choice D is presented at the end of paragraph 5.
12. **C.** The information in choice A is incorrect because paragraph 7 says that the Amery Ice Shelf is well suited to the production of green icebergs. This does not mean that the Amery Ice Shelf produces only green icebergs. The information in choice B is incorrect because copper and iron are mentioned in paragraph 3 only as possible color sources in green icebergs. The last sentence in paragraph 3 states that a source other than copper and iron was found. The information in choice D is incorrect because the passage gives no indication of where all green icebergs are located. Paragraph 2 mentions the Weddell Sea in Antarctica, and paragraph 7 states that green icebergs “drift” around Antarctica. Therefore green icebergs can be found far from the Amery Ice Shelf.
13. **B.** Square B is correct because the sentence provided introduces two possible explanations for the color of green icebergs. Paragraph 3 is the first place in the passage where explanations are offered for the color of green icebergs. The beginning of paragraph 3 is the only appropriate place to introduce these possible explanations.
14. **CDF.** Choice A, “Ice cores were used to determine that green icebergs were formed from the compaction of metallic compounds, including copper and iron,” is incorrect because it is factually incorrect according to the passage. The last sentence in paragraph 3 contradicts this idea. Choice B, “All ice shelves can produce green icebergs, but the Amery Ice Shelf is especially well suited to do so,” is incorrect because the passage does not state at any point that ice shelves other than the Amery Ice Shelf can produce green icebergs. Choice E, “Green icebergs are white until they come into contact with seawater containing platelets and soluble organic green pigments,” is incorrect because the passage never discusses whether green icebergs are originally white, or any particular color.



**TOEFL Official Guide Practice Test 3****自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Swimming Machines**

Tunas, mackerels, and billfishes (marlins, sailfishes, and swordfish) swim continuously. Feeding, courtship, reproduction, and even “rest” are carried out while in constant motion. As a result, practically every aspect of the body form and function of these swimming “machines” is adapted to enhance their ability to swim.

Many of the adaptations of these fishes serve to reduce water resistance (drag). Interestingly enough, several of these hydrodynamic adaptations resemble features designed to improve the aerodynamics of high-speed aircraft. Though human engineers are new to the game, tunas and their relatives evolved their “high-tech” designs long ago.

Tunas, mackerels, and billfishes have made streamlining into an art form. Their bodies are sleek and compact. The body shapes of tunas, in fact, are nearly ideal from an engineering point of view. Most species lack scales over most of the body, making it smooth and slippery. The eyes lie flush with the body and do not protrude at all. They are also covered with a slick, transparent lid that reduces drag. The fins are stiff, smooth, and narrow, qualities that also help cut drag. When not in use, the fins are tucked into special grooves or depressions so that they lie flush with the body and do not break up its smooth contours. Airplanes retract their landing gear while in flight for the same reason.

Tunas, mackerels, and billfishes have even more sophisticated adaptations than these to improve their hydrodynamics. The long bill of marlins, sailfishes, and swordfish probably helps them slip through the water. Many supersonic aircraft have a similar needle at the nose.

Most tunas and billfishes have a series of keels and finlets near the tail. Although most of their scales have been lost, tunas and mackerels retain a patch of coarse scales near the head called the corselet. The keels, finlets, and corselet help direct the flow of water over the body surface in such a way as to reduce resistance (see the figure). Again, supersonic jets have similar features.

■ Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. ■ Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. ■ In fact, tunas must swim to breathe. ■ They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

**One potential problem is that opening the mouth to breathe detracts from the streamlining of these fishes and tends to slow them down.** Some species of tuna have specialized grooves in their tongue. It is thought that these grooves help to channel water through the mouth and out the gill slits, thereby reducing water resistance.

There are adaptations that increase the amount of forward thrust as well as those that reduce drag. Again, these fishes are the envy of engineers. Their high, narrow tails with swept-back tips are almost perfectly adapted to provide propulsion with the least possible effort. Perhaps most important of all to these and other fast swimmers is their ability to sense and make use of swirls and eddies (circular currents) in the water. They can glide past eddies that would slow them down and then gain extra thrust by “pushing off” the eddies. Scientists and engineers are beginning to study this ability of fishes in the hope of designing more efficient propulsion systems for ships.

The muscles of these fishes and the mechanism that maintains a warm body temperature are also highly efficient. A bluefin tuna in water of 7°C (45°F) can maintain a core temperature of over 25°C (77°F). This warm body temperature may help not only the muscles to work better, but also the brain and the eyes. The billfishes have gone one step further. They have evolved special “heaters” of modified muscle tissue that warm the eyes and brain, maintaining peak performance of these critical organs.

1. The word **“enhance”** in the passage is closest in meaning to
  - (A) use
  - (B) improve
  - (C) counteract
  - (D) balance
2. The word **“they”** in the passage refers to
  - (A) qualities
  - (B) fins
  - (C) grooves
  - (D) depressions
3. Why does the author mention that **“Airplanes retract their landing gear while in flight”**?
  - (A) To show that air resistance and water resistance work differently from each other
  - (B) To argue that some fishes are better designed than airplanes are
  - (C) To provide evidence that airplane engine have studied the design of fish bodies
  - (D) To demonstrate a similarity in design between certain fishes and airplanes
4. The word **“sophisticated”** in the passage is closest in meaning to
  - (A) complex
  - (B) amazing
  - (C) creative
  - (D) practical
5. According to paragraph 4, the long bills of marlins, sailfish, and swordfish probably help these fishes by
  - (A) Increasing their ability to defend themselves
  - (B) Allowing them to change direction easily
  - (C) Increasing their ability to detect odors
  - (D) Reducing water resistance as they swim
6. According to the passage, which of the following is one of the reasons that tunas are in constant motion?
  - (A) They lack a swim bladder.
  - (B) They need to suck in more water than other fishes do.
  - (C) They have large muscles for breathing.
  - (D) They cannot open their mouths unless they are in motion.
7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) These fishes often have a problem opening their mouths while swimming.
  - (B) The streamlining of these fishes prevents them from slowing down.
  - (C) The streamlining of these fishes tends to slow down their breathing.
  - (D) Opening the mouth to breathe can reduce the speed of these fishes.
8. The word **“channel”** in the passage is closest in meaning to
  - (A) reduce
  - (B) remove
  - (C) direct
  - (D) provide
9. According to the passage, one of the adaptations of fast-swimming fishes that might be used to improve the performance of ships is these fishes’ ability to
  - (A) Swim directly through eddies
  - (B) Make efficient use of water currents
  - (C) Cover great distances without stopping
  - (D) Gain speed by forcing water past their gills
10. According to paragraph 9, which of the following is true of bluefin tunas?
  - (A) Their eyes and brain are more efficient than those of any other fish.

- (B) Their body temperature can change greatly depending on the water temperature.
- (C) They can swim in waters that are much colder than their own bodies.
- (D) They have special muscle tissue that warms their eyes and brain.

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Consequently, tunas do not need to suck in water.

**Where would the sentence best fit?**

**12. Directions: Complete the table below by indicating which features of fishes are associated in the passage with reducing water resistance and which are associated with increasing thrust. This question is worth 3 points.**

Reducing Water Resistance (THREE):
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Increasing Thrust (TWO):
--------------------------

**Answer choices**

- (A) The absence of scales from most of the body
- (B) The ability to take advantage of eddies
- (C) The ability to feed and reproduce while swimming
- (D) Eyes that do not protrude
- (E) Fins that are stiff, narrow, and smooth
- (F) The habit of swimming with the mouth open
- (G) A high, narrow tail with swept-back tips

### 笔记区

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**参考答案与解析 (摘自 Official Guide)**

1. **B.** To *enhance* something means to “make it better.” If something has been “improved,” it has been made better.
2. **B.** This is a simple pronoun-referent item. The word *they* refers to something that lies flush with the body when not in use. This is true only of “fins.”
3. **D.** The paragraph in which the highlighted phrase appears describes how certain fish use their fins. The highlighted phrase is used to provide a more familiar example (airplanes) of the principle involved to help the reader visualize how fins work. The paragraph does not discuss airplanes in any other context, so choices B and C are incorrect. Air and water resistance are not mentioned in this paragraph, so choice A is incorrect.
4. **A.** If something is *sophisticated*, it is “not simple,” so it must be “complex.”
5. **D.** The overall theme of the passage is how certain fish swim so efficiently. Paragraphs 1 and 2 make the general statement that “practically every aspect of the body form and function of these swimming ‘machines’ is adapted to enhance their ability to swim. Many of the adaptations of these fishes serve to reduce water resistance (drag).” Paragraph 4 explicitly states (emphasis added) that “Tunas, mackerels, and billfishes have even more sophisticated adaptations than these to improve their hydrodynamics. The long bill of marlins, sailfishes, and swordfish probably helps them slip through the water.” This is a specific example of one adaptation that these fish have made to increase their swimming efficiency. None of the other choices is mentioned in the paragraph.
6. **A.** Paragraph 6 explicitly states “...tunas must swim to breathe. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder...” The other choices are not supported by the passage.
7. **D.** Choice A says that these fish have trouble opening their mouths while swimming, which is not true. Choice B, that streamlining prevents fish from slowing down, may be true, but it is not mentioned in this sentence. The fish are slowed down when they open their mouths, which reduces streamlining. Choice C, that streamlining slows the fishes’ breathing, is also not mentioned.
8. **C.** *Channel* here is used as a verb, meaning to “move” or “push.”
9. **B.** Paragraph 8 explicitly states: “Perhaps most important of all to these and other fast swimmers is their ability to sense and make use of swirls and eddies (circular currents) in the water. They can glide past eddies that would slow them down and then gain extra thrust by “pushing off” the eddies. Scientists and engineers are beginning to study this ability of fishes in the hope of designing more efficient propulsion systems for ships.” The other choices are not mentioned in connection with the performance of ships.
10. **C.** That paragraph says, “A bluefin tuna in water of 7°C (45°F) can maintain a core temperature of over 25°C (77°F).” So it is clear that choice C is correct. Choice A is not stated in the paragraph. Choice B is contradicted by the paragraph. Choice D is true of billfish, not bluefin tuna.
11. **B.** The sentence provides an explanation for the muscle loss described in the sentence that follows square B and is a result of the fact described in the preceding sentence, which says that because the fish are always swimming, they only have to open their mouths to suck in water. Thus if the provided sentence is inserted at square B, it provides a logical bridge between cause and effect. The sentence makes no logical sense anywhere else.
12. **Reducing water resistance: ADE; increasing thrust: BG.** Choice C: “The ability to feed and reproduce while swimming” does not belong in the table because it is not mentioned in the passage in connection with either reducing water resistance or increasing thrust. Choice F: “The habit of swimming with the mouth open” does not belong in the table because it is not mentioned in the passage in connection with either reducing water resistance or increasing thrust.

**自我评价**

用时：     分     秒

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**Aggression**

When one animal attacks another, it engages in the most obvious example of aggressive behavior. Psychologists have adopted several approaches to understanding aggressive behavior in people.

**The Biological Approach.** Numerous biological structures and chemicals appear to be involved in aggression. One is the hypothalamus, a region of the brain. In response to certain stimuli, many animals show instinctive aggressive reactions. The hypothalamus appears to be involved in this inborn reaction pattern: electrical stimulation of part of the hypothalamus triggers stereotypical aggressive behaviors in many animals. In people, however, whose brains are more complex, other brain structures apparently moderate possible instincts.

An offshoot of the biological approach called *sociobiology* suggests that aggression is natural and even desirable for people. Sociobiology views much social behavior, including aggressive behavior, as genetically determined. Consider Darwin's theory of evolution. Darwin held that many more individuals are produced than can find food and survive into adulthood. A struggle for survival follows. Those individuals who possess characteristics that provide them with an advantage in the struggle for existence are more likely to survive and contribute their genes to the next generation. In many species, such characteristics include aggressiveness. Because aggressive individuals are more likely to survive and reproduce, whatever genes are linked to aggressive behavior are more likely to be transmitted to subsequent generations.

The sociobiological view has been attacked on numerous grounds. One is that people's capacity to outwit other species, not their aggressiveness, appears to be the dominant factor in human survival. Another is that there is too much variation among people to believe that they are dominated by, or at the mercy of, aggressive impulses.

**The Psychodynamic Approach.** Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. ■ Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. ■ The Freudian perspective, in a sense, sees us as "steam engines." ■ By holding in rather than venting "steam," we set the stage for future explosions. ■ Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

According to psychodynamic theory, the best ways to prevent harmful aggression may be to encourage less harmful aggression. In the steam-engine analogy, verbal aggression may vent some of the aggressive steam. So might cheering on one's favorite sports team. Psychoanalysts, therapists adopting a psychodynamic approach, refer to the venting of aggressive impulses as "catharsis." Catharsis is theorized to be a safety valve. But research findings on the usefulness of catharsis are mixed. Some studies suggest that catharsis leads to reductions in tension and a lowered likelihood of future aggression. Other studies, however, suggest that letting some steam escape actually encourages more aggression later on.

**The Cognitive Approach.** Cognitive psychologists assert that our behavior is influenced by our values, by the ways in which we interpret our situations, and by choice. **For example, people who believe that aggression is necessary and justified—as during wartime—are likely to act aggressively, whereas people who believe that a particular war or act of aggression is unjust, or who think that aggression is never justified, are less likely to behave aggressively.**

One cognitive theory suggests that aggravating and painful events trigger unpleasant feelings. These feelings, in turn, can lead to aggressive action, but *not* automatically. Cognitive factors intervene. People *decide* whether they will act aggressively or not on the basis of factors such as their experiences with aggression and their interpretation of other people's motives. Supporting evidence comes from research showing that aggressive people often distort other people's motives. For example, they assume that other people mean them harm when they do not.

1. **According to paragraph 2, what evidence indicates that aggression in animals is related to the hypothalamus?**
  - (A) Some aggressive animal species have a highly developed hypothalamus.
  - (B) Electrical stimulation of the hypothalamus delays animals' inborn reaction patterns.
  - (C) Animals behaving aggressively show increased activity in the hypothalamus.
  - (D) Animals who lack a hypothalamus display few aggressive tendencies.
2. **According to Darwin's theory of evolution, members of a species are forced to struggle for survival because**
  - (A) Not all individuals are skilled in finding food
  - (B) Individuals try to defend their young against attackers
  - (C) Many more individuals are born than can survive until the age of reproduction
  - (D) Individuals with certain genes are more likely to reach adulthood
3. **The word "inevitable" in the passage is closest in meaning to**
  - (A) unavoidable
  - (B) regrettable
  - (C) controllable
  - (D) unsuitable
4. **The word "gratify" in the passage is closest in meaning to**
  - (A) identify
  - (B) modify
  - (C) satisfy
  - (D) simplify
5. **The word "they" in the passage refers to**
  - (A) future explosions
  - (B) pent-up aggressive impulses
  - (C) outlets
  - (D) indirect ways
6. **According to paragraph 5, Freud believed that children experience conflict between a desire to vent aggression on their parents and**
  - (A) A frustration that their parents do not give them everything they want
  - (B) A fear that their parents will punish them and stop loving them
  - (C) A desire to take care of their parents
  - (D) A desire to vent aggression on other family members
7. **Freud describes people as "steam engines" in order to make the point that people**
  - (A) Deliberately build up their aggression to make themselves stronger
  - (B) Usually release aggression in explosive ways
  - (C) Must vent their aggression to prevent it from building up
  - (D) Typically lose their aggression if they do not express it
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) People who believe that they are fighting a just war act aggressively while those who believe that they are fighting an unjust war do not.
  - (B) People who believe that aggression is necessary and justified are more likely to act aggressively than those who believe differently.
  - (C) People who normally do not believe that aggression is necessary and justified may act aggressively during wartime.
  - (D) People who believe that aggression is necessary and justified do not necessarily act aggressively during wartime.
9. **According to the cognitive approach described in paragraphs 7 and 8, all of the following may influence the decision whether to act aggressively EXCEPT a person's**
  - (A) moral values

- (B) previous experiences with aggression
- (C) instinct to avoid aggression
- (D) beliefs about other people's intentions

**10. The word “distort” in the passage is closest in meaning to**

- (A) mistrust
- (B) misinterpret
- (C) criticize
- (D) resent

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

According to Freud, however, impulses that have been repressed continue to exist and demand expression.

**Where would the sentence best fit?**

**12. Directions: Complete the table below by matching five of the six answer choices with the approach to aggression that they exemplify. This question is worth 3 points.**

Biological Approach (ONE):
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Psychodynamic Approach (TWO):
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Cognitive Approach (TWO):
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**Answer choices**

- (A) Aggressive impulses toward people are sometimes expressed in indirect ways.
- (B) Aggressiveness is often useful for individuals in the struggle for survival.
- (C) Aggressive behavior may involve a misunderstanding of other people's intentions.
- (D) The need to express aggressive impulses declines with age.
- (E) Acting aggressively is the result of a choice influenced by a person's values and beliefs.
- (F) Repressing aggressive impulses can result in aggressive behavior.

**笔记区**

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**参考答案与解析 (摘自 Official Guide)**

1. **C.** Answer choice A is not supported by the passage. It does not discuss more and less aggressive species or relative development of the hypothalamus. Answer choice B contradicts the passage. Electrical stimulation of the hypothalamus causes the instinctive reaction of aggression, it does not delay it. Answer choice D is incorrect because the passage does not cite as evidence, or even mention, the removal of the hypothalamus.  
 以上内容为 OG 给出的解释, 但本人认为此题无正确选项。因为 C 选项中的 increased activity 为原文未提及内容, 因此 C 项不正确。B 选项中 artificial 错误, 因为我们不能从原文当中的电刺激海马体导致动物侵略性推出人工的刺激海马体能导致动物侵略性, 这个是一个以偏概全的结论, 因此建议将 B 选项中的 **artificial** 改为 **electrical**, 则 B 选项为正确选项。
2. **C.** This answer choice is essentially a paraphrase of paragraph 3, sentence 4: "Darwin held that many more individuals are produced than can find food and survive into adulthood." Choices A and B are not mentioned at all. Choice D may be true, but it is not stated in the passage as a fact; an inference is needed to support it.
3. **A.** If something is *inevitable*, that means that it will occur no matter what; in other words, it is unavoidable.
4. **C.** If a person's desires are *gratified*, those desires are fulfilled. Thus the person is satisfied.
5. **B.** This is a simple pronoun-referent item. The word *they* here refers to something that "may be expressed toward strangers later in life." This is the "outlet" toward which the "aggressive impulses" mentioned may be directed.
6. **B.** The answer is found in paragraph 5 in the sentence that reads, "Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses." Answer choice B is the only choice that correctly identifies the cause of the conflict created by repressing aggression in children.
7. **C.** *Steam engines* will explode if their steam builds up indefinitely. The same is true of people, as choice C indicates. The other choices are not necessarily true of both people and steam engines, so they are incorrect.
8. **B.** Choice A changes the meaning of the sentence; it says categorically that "those (people) who believe that they are fighting an unjust war do not (act aggressively)." The highlighted sentence merely says that such people are "less likely" to act aggressively, not that they never will; this changes the meaning. Choice C says, "People who normally do not believe that aggression is necessary and justified may act aggressively during wartime." This is incorrect because it leaves out critical information: it does not mention people who do believe aggression is necessary. This choice does not make the same comparison as the highlighted sentence. Choice D, "People who believe that aggression is necessary and justified do not necessarily act aggressively during wartime," also changes the meaning of the sentence by leaving out essential information. In this choice, no mention is made of people who do not believe aggression is necessary. This choice does not make the same comparison as the highlighted sentence.
9. **C.** Choice C, the "instinct to avoid aggression," is not mentioned, so it is the correct answer here.
10. **B.** To distort other people's motives is to twist them, or view them incorrectly and thereby not understand them properly. Something that is not understood properly is misinterpreted.
11. **B.** Square B is correct because the sentence being inserted is a connective sentence, connecting the idea of childhood repression in the preceding sentence to the "Freudian perspective" in the sentence that follows. The use of the word *however* in this sentence indicates that an idea already introduced (the repression of children's aggressive impulses) is being modified. Here, the inserted sentence tells us that Freud thought that even though these impulses are repressed, they continue to exist. This serves as a connection to the next sentence and the "Freudian perspective." Inserting the sentence at square A would place the modification ("however, impulses...continue to exist") before the idea that it modifies (repression of impulses). This makes no logical sense. Inserting the sentence at square C would move the modifying sentence away from its logical position immediately following the idea that it modifies (repression of impulses). Placing the insert sentence at square D moves the sentence farther from its logical antecedent and has no connection to the sentence that follows it.
12. **Biological approach: B; psychodynamic approach: AF; cognitive approach: CE.** Choice D: "The need to express aggressive impulses declines with age" is not mentioned in connection with any of the approaches to aggression discussed in the passage, so it should not be used.



**自我评价**

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难度：易 / 中 / 难

错误：     个

**Artisans and Industrialization**

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. ■ As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. ■ In addition, women often worked in their homes parttime, making finished articles from raw material supplied by merchant capitalists. ■ After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. ■ Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

The creation of a labor force that was accustomed to working in factories did not occur easily. Before the rise of the factory, artisans had worked within the home. **Apprentices were considered part of the family, and masters were responsible not only for teaching their apprentices a trade but also for providing them some education and for supervising their moral behavior.** Journeymen knew that if they perfected their skill, they could become respected master artisans with their own shops. Also, skilled artisans did not work by the clock, at a steady pace, but rather in bursts of intense labor alternating with more leisurely time.

The factory changed that. Goods produced by factories were not as finished or elegant as those done by hand, and pride in craftsmanship gave way to the pressure to increase rates of productivity. The new methods of doing business involved a new and stricter sense of time. Factory life necessitated a more regimented schedule, where work began at the sound of a bell and workers kept machines going at a constant pace. At the same time, workers were required to discard old habits, for industrialism demanded a worker who was alert, dependable, and self-disciplined. Absenteeism and lateness hurt productivity and, since work was specialized, disrupted the regular factory routine. Industrialization not only produced a fundamental change in the way work was organized; it transformed the very nature of work.

The first generation to experience these changes did not adopt the new attitudes easily. The factory clock became the symbol of the new work rules. One mill worker who finally quit complained revealingly about "obedience to the ding-dong of the bell—just as though we are so many living machines." With the loss of personal freedom also came the loss of standing in the community. Unlike artisan workshops in which apprentices worked closely with the masters supervising them, factories sharply separated workers from management. Few workers rose through the ranks to supervisory positions, and even fewer could achieve the artisan's dream of setting up one's own business. Even well-paid workers sensed their decline in status.

In this newly emerging economic order, workers sometimes organized to protect their rights and traditional ways of life. Craftworkers such as carpenters, printers, and tailors formed unions, and in 1834 individual unions came together in the National Trades' Union. The labor movement gathered some momentum in the decade before the Panic of 1837, but in the depression that followed, labor's strength collapsed. During hard times, few workers were willing to *strike*\* or engage in collective action. And skilled craftworkers, who spearheaded the union movement, did not feel a particularly strong bond with semiskilled factory workers and unskilled laborers. More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850's, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

Workers were united in resenting the industrial system and their loss of status, but they were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics. For them, the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives. As United States society became more specialized and differentiated, greater extremes of wealth began to appear. And as the new markets created fortunes for the few, the factory system lowered the wages of workers by dividing labor into smaller, less skilled tasks.

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**Strike:** A stopping of work that is organized by workers

1. **Which of the following can be inferred from the passage about articles manufactured before 1815?**
  - (A) They were primarily produced by women.
  - (B) They were generally produced in shops rather than in homes.
  - (C) They were produced with more concern for quality than for speed of production.
  - (D) They were produced mostly in large cities with extensive transportation networks.
2. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Masters demanded moral behavior from apprentices but often treated them irresponsibly.
  - (B) The responsibilities of the master to the apprentice went beyond the teaching of a trade.
  - (C) Masters preferred to maintain the trade within the family by supervising and educating the younger family members.
  - (D) Masters who trained members of their own family as apprentices demanded excellence from them.
3. **The word “disrupted” in the passage is closest in meaning to**
  - (A) prolonged
  - (B) established
  - (C) followed
  - (D) upset
4. **In paragraph 4, the author includes the quotation from a mill worker in order to**
  - (A) Support the idea that it was difficult for workers to adjust to working in factories
  - (B) To show that workers sometimes quit because of the loud noise made by factory machinery
  - (C) Argue that clocks did not have a useful function in factories
  - (D) Emphasize that factories were most successful when workers revealed their complaints
5. **All of the following are mentioned in paragraph 4 as consequences of the new system for workers EXCEPT a loss of**
  - (A) freedom
  - (B) status in the community
  - (C) opportunities for advancement
  - (D) contact among workers who were not managers
6. **The phrase “gathered some momentum” in the passage is closest in meaning to**
  - (A) made progress
  - (B) became active
  - (C) caused changes
  - (D) combined forces
7. **The word “spearheaded” in the passage is closest in meaning to**
  - (A) led
  - (B) accepted
  - (C) changed
  - (D) resisted
8. **Which of the following statements about the labor movement of the 1800’s is supported by paragraph 5?**
  - (A) It was most successful during times of economic crisis.
  - (B) Its primary purpose was to benefit unskilled laborers.
  - (C) It was slow to improve conditions for workers.
  - (D) It helped workers of all skill levels form a strong bond with each other.
9. **The author identifies political party loyalties, and disagreements over tactics as two of several factors that**
  - (A) Encouraged workers to demand higher wages
  - (B) Created divisions among workers
  - (C) Caused work to become more specialized
  - (D) Increased workers’ resentment of the industrial system
10. **The word “them” in the passage refers to**

- (A) workers
- (B) political party loyalties
- (C) disagreements over tactics
- (D) agents of opportunity

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.

**Where would the sentence best fit?**

**12. Directions: Complete the table below by indicating which of the answer choices describe characteristics of the period before 1815 and which describe characteristics of the 1815–1850 period. This question is worth 3 points.**

Before 1815 (TWO):
1815–1850 (THREE):

**Answer choices**

- (A) A united, highly successful labor movement took shape.
- (B) Workers took pride in their workmanship.
- (C) The income gap between the rich and the poor increased greatly.
- (D) Transportation networks began to decline.
- (E) Emphasis was placed on following schedules.
- (F) Workers went through an extensive period of training.
- (G) Few workers expected to own their own businesses.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析 (摘自 Official Guide)

1. **C.** A number of statements throughout the passage support choice C. Paragraph 1 states that “Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans...After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers.” Paragraph 2 states that “Before the rise of the factory...skilled artisans did not work by the clock, at a steady pace, but rather in bursts of intense labor alternating with more leisurely time.” Paragraph 3 states, “The factory changed that. Goods produced by factories were not as finished or elegant as those done by hand, and pride in craftsmanship gave way to the pressure to increase rates of productivity.” Taken together, these three statements, about production rates, the rise of factories after 1815, and the decline of craftsmanship after 1815, support the inference that before 1815, the emphasis had been on quality rather than on speed of production. Answer choices A, B, and D are all contradicted by the passage.
2. **B.** Choice A changes the meaning of the highlighted sentence by stating that masters often treated apprentices irresponsibly. Choice C contradicts the essential meaning of the highlighted sentence. The fact that “Apprentices were considered part of the family...” suggests that they were not actual family members. Choice D, like choice C, changes the meaning of the highlighted sentence by discussing family members as apprentices.
3. **D.** The word *upset* here is used in the context of “hurting productivity.” When something is hurt or damaged, it is “upset.”
4. **A.** The paragraph begins by stating that workers did not adopt new attitudes toward work easily and that the clock symbolized the new work rules. The author provides the quotation as evidence of that difficulty. There is no indication in the paragraph that workers quit due to loud noise, so choice B is incorrect. Choice C (usefulness of clocks) is contradicted by the paragraph. The factory clock was “useful,” but workers hated it. Choice D (workers complaints as a cause of a factory’s success) is not discussed in this paragraph.
5. **D.** The paragraph explicitly contradicts this by stating that “factories sharply separated workers from management.” The paragraph explicitly states that workers lost choice A (freedom), choice B (status in the community), and choice C (opportunities for advancement) in the new system, so those choices are all incorrect.
6. **A.** To *gather momentum* means to advance with increasing speed.
7. **A.** The head of a spear leads the rest of the spear, so the craftworkers who *spearheaded* this movement led it.
8. **C.** The paragraph states, “More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850’s, and the courts also recognized workers’ right to strike, but these gains had little immediate impact.” This statement explicitly supports choice C. All three other choices are contradicted by the paragraph.
9. **B.** The paragraph states (emphasis added): “...they (workers) were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics.” So “political party loyalties and disagreements over tactics” are explicitly stated as two causes of division among workers. The other choices are not stated and are incorrect.
10. **A.** The word *them* in this sentence refers to those people to whom “the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives.” Choice A, “Workers,” is the only choice that refers to this type of person, so it is the correct answer.
11. **D.** The inserted sentence refers explicitly to “a new form of manufacturing.” This “new form of manufacturing” is the one mentioned in the sentence preceding square D, “factories with machinery tended by unskilled or semiskilled laborers.” The inserted sentence then explains that this new system depended on “the movement of goods to distant locations and a centralized source of laborers.” The sentence that follows square D goes on to say, “Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.” Thus the inserted sentence contains references to both the sentence before square D and the sentence after square D.
12. **Before 1815: BF; 1815–1850: CEG.** Choice A: “A united, highly successful labor movement took shape” does not belong in the table because it contradicts the passage. Choice D: “Transportation networks began to decline” does not belong in the table because it is not mentioned in the passage in connection with either the period before 1815 or the period between 1815 and 1850.

**自我评价**

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难度：易 / 中 / 难

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**Groundwater**

Groundwater is the word used to describe water that saturates the ground, filling all the available spaces. By far the most abundant type of groundwater is meteoric water; this is the groundwater that circulates as part of the water cycle. Ordinary meteoric water is water that has soaked into the ground from the surface, from precipitation (rain and snow) and from lakes and streams. There it remains, sometimes for long periods, before emerging at the surface again. At first thought it seems **incredible** that there can be enough space in the "solid" ground underfoot to hold all this water.

The necessary space is there, however, in many forms. The commonest spaces are those among the particles—sand grains and tiny pebbles—of loose, unconsolidated sand and gravel. Beds of this material, **out of sight** beneath the soil, are common. They are found wherever fast rivers carrying loads of coarse sediment once flowed. For example, as the great ice sheets that covered North America during the last ice age steadily melted away, huge volumes of water flowed from them. The water was always laden with pebbles, gravel, and sand, known as **glacial outwash**, that was deposited as the flow slowed down.

The same thing happens to this day, though on a smaller scale, wherever a sediment-laden river or stream emerges from a mountain valley onto relatively flat land, dropping its load as the current slows: the water usually spreads out fanwise, depositing the sediment in the form of a smooth, fan-shaped slope. Sediments are also dropped where a river slows on entering a lake or the sea, the deposited sediments are on a lake floor or the seafloor at first, but will be located inland at some future date, when the sea level falls or the land rises; such beds are sometimes thousands of meters thick.

In lowland country almost any spot on the ground may **overlie** what was once the bed of a river that has since become buried by soil; if they are now below the water's upper surface (the water table), the gravels and sands of the former riverbed, and its sandbars, will be saturated with groundwater.

**So much for** unconsolidated sediments. Consolidated (or cemented) sediments, too, contain millions of minute water-holding pores. This is because the gaps among the original grains are often not totally **plugged** with cementing chemicals; also, parts of the original grains may become dissolved by percolating groundwater, either while consolidation is taking place or at any time afterwards. The result is that sandstone, for example, can be as porous as the loose sand from which it was formed.

Thus a proportion of the total volume of any sediment, loose or cemented, consists of empty space. Most crystalline rocks are much more solid; a common exception is basalt, a form of solidified volcanic lava, which is sometimes full of tiny bubbles that make it very porous.

The proportion of empty space in a rock is known as its porosity. But note that porosity is not the same as permeability, which measures the ease with which water can flow through a material; this depends on the sizes of the individual cavities and the crevices linking them.

Much of the water in a sample of water-saturated sediment or rock will drain from it if the sample is put in a suitable dry place. ■ But some will remain, clinging to all solid surfaces. ■ It is held there by the force of surface tension without which water would drain instantly from any wet surface, leaving it totally dry. ■ The total volume of water in the saturated sample must therefore be thought of as consisting of water that can, and water that cannot, drain away. ■

The relative amount of these two kinds of water varies greatly from one kind of rock or sediment to another, even though their porosities may be the same. What happens depends on pore size. **If the pores are large, the water in them will exist as drops too heavy for surface tension to hold, and it will drain away; but if the pores are small enough, the water in them will exist as thin films, too light to overcome the force of surface tension holding them in place; then the water will be firmly held.**

1. Which of the following can be inferred from paragraph 1 about the ground that we walk on?
  - (A) It cannot hold rainwater for long periods of time.
  - (B) It prevents most groundwater from circulating.
  - (C) It has the capacity to store large amounts of water.
  - (D) It absorbs most of the water it contains from rivers.
2. The word “incredible” in the passage is closest in meaning to
  - (A) confusing
  - (B) comforting
  - (C) unbelievable
  - (D) interesting
3. The word “out of sight” in the passage is closest in meaning to
  - (A) far away
  - (B) hidden
  - (C) partly visible
  - (D) discovered
4. According to paragraph 2, where is groundwater usually found?
  - (A) Inside pieces of sand and gravel
  - (B) On top of beds of rock
  - (C) In fast rivers that are flowing beneath the soil
  - (D) In spaces between pieces of sediment
5. The phrase “glacial outwash” in the passage refers to
  - (A) fast rivers
  - (B) glaciers
  - (C) the huge volumes of water created by glacial melting
  - (D) the particles carried in water from melting glaciers
6. All of the following are mentioned in paragraph 3 as places that sediment-laden rivers can deposit their sediments EXCEPT
  - (A) A mountain valley
  - (B) Flat land
  - (C) A lake floor
  - (D) The seafloor
7. The word “overlie” in the passage is closest in meaning to
  - (A) cover
  - (B) change
  - (C) separate
  - (D) surround
8. The phrase “So much for” in the passage is closest in meaning to
  - (A) that is enough about
  - (B) now let us turn to
  - (C) of greater concern are
  - (D) this is related to
9. The word “plugged” in the passage is closest in meaning to
  - (A) washed
  - (B) dragged
  - (C) filled up
  - (D) soaked through
10. According to paragraphs 6 and 7, why is basalt unlike most crystalline forms of rock?
  - (A) It is unusually solid.
  - (B) It often has high porosity.
  - (C) It has a low proportion of empty space.
  - (D) It is highly permeable.
11. What is the main purpose of paragraph 7?

- (A) To explain why water can flow through rock
- (B) To emphasize the large amount of empty space in all rock
- (C) To point out that a rock cannot be both porous and permeable
- (D) To distinguish between two related properties of rock

**12. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Surface tension is not strong enough to retain drops of water in rocks with large pores but it strong enough to hold on to thin films of water in rocks with small pores.
- (B) Water in rocks is held in place by large pores and drains away from small size pores through surface tension.
- (C) Small pores and large pores both interact with surface tension to determine whether a rock will hold water as heavy drops or as a thin film.
- (D) If the force of surface tension is too weak to hold water in place as heavy drops, the water will continue to be held firmly in place as a thin film when large pores exist.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

What, then, determines what proportion of the water stays and what proportion drains away?

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Much of the ground is actually saturated with water.

**Answer choices**

- (A) Sediments that hold water were spread by glaciers and are still spread by rivers and streams.
- (B) Water is stored underground in beds of loose sand and gravel or in cemented sediment.
- (C) The size of a saturated rock's pores determines how much water it will retain when the rock is put in a dry place.
- (D) Groundwater often remains underground for a long time before it emerges again.
- (E) Like sandstone, basalt is a crystalline rock that is very porous.
- (F) Beds of unconsolidated sediments are typically located at inland sites that were once underwater.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **C**。以 ground 作为关键词定位至全段最后一句，说 at first sight 土地是不可能有那么大的空间去容纳这些水的，at first sight 第一眼看上去的意思是这个不是事实，而且事实刚好与这个相反，也就是说土地是有空间的，所以 C 正确。
2. 选 **C**。incredible 令人难以置信的，想到 credit card 信用卡，credit 指的是信用或者学分，ible 或者 able 表示可以……的，credible 可信的，incredible 难以置信的，不知道的话看上题也知道是不可能。
3. 选 **B**。out of sight 表面意思就是在视野之外，也就是看不见，C 和 D 都说看见，所以错。而且 far away 离得很远也不一定就看不见，所以也不对。不知道的话说 beneath the soil 在土下面，当然也是看不见之意，所以 B 正确。
4. 选 **D**。问的是地下水在哪最经常在哪儿发现，找到第二句中的 the commonest spaces are……最常见的地方是 blablabla，这个 blablabla 就是我们要的答案。在那些颗粒之间的空隙里，所以首先正确的答案应该是 space，答案 D 是正确的。
5. 选 **D**。glacial 是冰川的，与冰川有关的，outwash 是个合成词，表面意思就是冲出来的，不知道的读原文，原文说 pebble, gravel and sand, known as glacial outwash，也就是说前面的三个都叫做 glacial outwash，其中 sand 是一定知道的，不是水，所以 AC 错，更不是冰，B 错，应该是包括沙子在内的一堆小颗粒。
6. 选 **A**。排除题，可在第一句找到 flat land，在第二句的前半句 Sediments are also dropped where a river slows on entering a lake or the sea 找到 C 和 **D**，A 虽然有说到，但不是沉积物沉积的地点，所以要选的答案是 A。
7. 选 **A**。over 表示在……上，lie 表躺，所以 overlie 的意思是躺在……上，也就是 cover，原文说低地国家地上的任何一点都可能覆盖原来的河床，B 改变 C 分开 D 围绕全都不对。
8. 选 **A**。so much for 表面意思就是已经很多了，也就是足够的意 思，代入原文，说 unconsolidated 未固结的沉积物已经说了很多了，下面就说说固结的沉积物了，所以 A 正确，B 和 C 都说我们马上要讨论的是未固结的沉积物，所以说反了；D 表示与……相关，完全不沾边，错。
9. 选 **C**。plug 的意思是插入，填满。原文说原来颗粒之间的空隙没有被混凝土怎么样，而前一句说固结的沉积物之间有很多能够存水的空隙，既然是有空隙，就说明没被填满，所以答案是 filled up，A 洗 B 拖曳 D 浸透都不沾边。
10. 选 **B**。以 crystalline rock 和 basalt 为关键词定位至第六段的最后一句，原文说大部分 crystalline rock 是固化比较好的，但 basalt 是个例外，说 basalt 更加 porous，孔隙率更高，所以 B 正确。
11. 选 **D**。问第七段的目的，看本段的第一句，解释了孔隙度的概念，后来又说孔隙度和渗透率的概念不同，后面又解释了什么是渗透率，其实就是说这两个率不同，答案当然是区分这两个东西，D 正确。
12. 选 **A**。原文的结构是如果孔隙大，就怎么怎么样，如果孔隙小，就又是另外一个样；选项 B 说反，应该是孔隙大的话水会流走；C 孔隙大的时候与表面张力无关，所以不是 both；D 选项在若干处都偷换了原文的概念，完全不对。
13. 选 **D**。待插入句说多少流走多少剩下是什么决定的，所以之前必须得说一部分流走了一部分剩下了，原文最后一句才说到这个，所以 D 是答案。貌似 B 选项之前也说了流走和剩下，但 B 之后有个 it is held there，这个 it 指的是前文的留下来的水，所以与上文过渡紧密，不能插入句子。
14. 选 **ABC**。A 选项对应第二段的尾句和第三段的首句，正确；B 对应第二段的第二句和第五段的第二句，正确；C 选项对应第八段最后一句，正确；剩下的三个选项都太细节，不具有概括性，不选。



## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## The Origins of Theater

In seeking to describe the origins of theater, one must rely primarily on speculation, since there is little concrete evidence on which to draw. The most widely accepted theory, **championed** by anthropologists in the late nineteenth and early twentieth centuries, envisions theater as emerging out of myth and ritual. The process perceived by these anthropologists may be summarized briefly. During the early stages of its development, a society becomes aware of forces that appear to influence or control its food supply and well-being. Having little understanding of natural causes, it **attributes** both desirable and undesirable occurrences to supernatural or magical forces, and it searches for means to win the favor of these forces. Perceiving an apparent connection between certain actions performed by the group and the result it desires, the group repeats, refines and formalizes those actions into fixed ceremonies, or rituals.

Stories (myths) may then grow up around a ritual. Frequently the myths include representatives of those supernatural forces that the rites celebrate or hope to influence. Performers may wear costumes and masks to represent the mythical characters or supernatural forces in the rituals or in accompanying celebrations. As a people becomes more sophisticated, its conceptions of supernatural forces and causal relationships may change. As a result, it may abandon or modify some rites. But the myths that have grown up around the rites may continue as part of the group's oral tradition and may even come to be acted out under conditions divorced from these rites. When **this** occurs, the first step has been taken toward theater as an **autonomous** activity, and thereafter entertainment and aesthetic values may gradually replace the former mystical and socially efficacious concerns.

■ Although origin in ritual has long been the most popular, it is by no means the only theory about how the theater came into being. ■ Storytelling has been proposed as one alternative. ■ Under this theory, relating and listening to stories are seen as fundamental human pleasures. ■ Thus, the recalling of an event (a hunt, battle, or other feat) is elaborated through the narrator's pantomime and impersonation and eventually through each role being assumed by a different person.

A closely related theory sees theater as evolving out of dances that are primarily pantomimic, rhythmical or gymnastic, or from imitations of animal noises and sounds. Admiration for the performer's skill, virtuosity, and grace are seen as motivation for elaborating the activities into fully realized theatrical performances.

In addition to exploring the possible antecedents of theater, scholars have also theorized about the motives that led people to develop theater. Why did theater develop, and why was it valued after it ceased to fulfill the function of ritual? Most answers fall back on the theories about the human mind and basic human needs. One, set forth by Aristotle in the fourth century B.C., sees humans as naturally imitative—as taking pleasure in imitating persons, things, and actions and in seeing such imitations. Another, advanced in the twentieth century, suggests that humans have a gift for fantasy, through which they seek to reshape reality into more satisfying forms than those encountered in daily life. Thus, fantasy or fiction (of which drama is one form) permits people to objectify their anxieties and fears, confront them, and fulfill their hopes in fiction if not fact. The theater, then, is one tool whereby people define and understand their world or escape from unpleasant realities.

But neither the human imitative instinct nor a **penchant** for fantasy by itself leads to an autonomous theater. Therefore, additional explanations are needed. One necessary condition seems to be a somewhat detached view of human problems. For example, one sign of this condition is the appearance of the comic vision, since **comedy** requires sufficient detachment to view some deviations from social norms as ridiculous rather than as serious threats to the welfare of the entire group. Another condition that contributes to the development of autonomous theater is the emergence of the aesthetic sense. **For example, some early societies ceased to consider certain rites essential to their well-being and abandoned them, nevertheless, they retained as parts of their oral tradition the myths that had grown up around the rites and admired them for their artistic qualities rather than for their religious usefulness.**

1. The word “**championed**” in the passage is closest in meaning to
  - (A) changed
  - (B) debated
  - (C) created
  - (D) supported
2. The word “**attributes**” in the passage is closest in meaning to
  - (A) ascribes
  - (B) leaves
  - (C) limits
  - (D) contrasts
3. According to paragraph 1, theories of the origins of theater
  - (A) are mainly hypothetical
  - (B) are well supported by factual evidence
  - (C) have rarely been agreed upon by anthropologists
  - (D) were expressed in the early stages of theater’s development
4. According to paragraph 1, why did some societies develop and repeat ceremonial actions?
  - (A) To establish a positive connection between the members of the society
  - (B) To help society members better understand the forces controlling their food supply
  - (C) To distinguish their beliefs from those of other societies
  - (D) To increase the society’s prosperity
5. The word “**this**” in the passage refers to
  - (A) the acting out of rites
  - (B) the divorce of ritual performers from the rest of society
  - (C) the separation of myths from rites
  - (D) the celebration of supernatural forces
6. The word “**autonomous**” in the passage is closest in meaning to
  - (A) artistic
  - (B) important
  - (C) independent
  - (D) established
7. According to paragraph 2, what may cause societies to abandon certain rites?
  - (A) Emphasizing theater as entertainment
  - (B) Developing a new understanding of why events occur
  - (C) Finding a more sophisticated way of representing mythical characters
  - (D) Moving from a primarily oral tradition to a more written tradition
8. All of following are mentioned in paragraph 5 as possible reasons that led societies to develop theater EXCEPT
  - (A) Theater allows people to face that they are afraid of.
  - (B) Theater gives an opportunity to imagine a better reality.
  - (C) Theater is a way to enjoy imitating other people.
  - (D) Theater provides people the opportunity to better understand the human mind.
9. Which of the following best describes the organization of paragraph 5?
  - (A) The author presents two theories for a historical phenomenon.
  - (B) The author argues against theories expressed earlier in the passage.
  - (C) The author argues for replacing older theories with a new one.
  - (D) The author points out problems with two popular theories.
10. The word “**penchant**” in the passage is closest in meaning to
  - (A) compromise
  - (B) inclination
  - (C) tradition
  - (D) respect
11. Why does the author mention “**comedy**”?

- (A) To give an example of early types of theater
- (B) To explain how theater helps a society respond to threats to its welfare
- (C) To help explain why detachment is needed for the development of theater
- (D) To show how theatrical performers become detached from other members of society

**12. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) A society's rites were more likely to be retained in the oral tradition if its myths were admired for artistic qualities.
- (B) The artistic quality of a myth was sometimes an essential reason for a society to abandon it from the oral tradition.
- (C) Some early societies stopped using myths in their religious practices when rites ceased to be seen as useful for social well-being.
- (D) Myths sometimes survived in a society's tradition because of their artistic qualities even after they were no longer deemed religiously beneficial.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

To enhance their listeners' enjoyment, storytellers continually make their stories more engaging and memorable.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Anthropologists have developed many theories to help understand why and how theater originated.

**Answer choices**

- (A) The presence of theater in almost all societies is thought to have occurred because early storytellers traveled to different groups to tell their stories.
- (B) Many theorists believe that theater arises when societies act out myths to preserve social well-being.
- (C) The more sophisticated societies became, the better they could influence desirable occurrences through ritualized theater.
- (D) Some theories of theater development focus on how theater was used by group leaders to group leaders govern other members of society.
- (E) Theater may have come from pleasure humans receive from storytelling and moving rhythmically.
- (F) The human capacities for imitation and fantasy are considered possible reasons why societies develop theater.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **D**。champion 最常见的意思是冠军，但这里的 champion 是个动词，但他的意思应该与冠军有关，其实是拥护、支持的意思。A 改变 B 争论 C 创造都错。
2. 选 **A**。attribute 是归因于之意，表示因果关系，所以 ascribe 归因于正确。
3. 选 **A**。以 origins of theater 为关键词定位至本段第一句，one must rely primarily on speculation，主要靠推测，也就是 A，主要是推论的。不认识 hypothetical 的话之后有解释说没有事实证据，所以也能说明是推论的。
4. 选 **D**。ceremonial action 做关键词定位至全段最后一句，说人们是感觉到了他们的仪式性的活动和他们所期望的那种结果之间的联系之后他们才做这些事情的。前一句说他们把无论好坏的结果都归因于超自然的力量，他们做这些事情是为了赢得超自然力量的眷顾，所以 D 为了整个社会的繁荣是正确答案。
5. 选 **C**。就近原则往前，而且 this 不指代单个的名词，而指代整个词组或者句子，所以指代的应该是前面的 the myths may even come to be acted out under conditions divorced from these rites，指的是仪式与神话的分离，C 正确，注意 divorce 不仅仅可以表示离婚，等于 separation。
6. 选 **C**。autonomous 自主的，自治的，自发的，从这个词本身看，auto 是自动的意思，所以跟它最有关联的就是 independent 独立了。
7. 选 **B**。以 abandon rites 做关键词定位至全段倒数第三句，有个 as a result，说明之前的句子是导致人们放弃这种仪式的原因，也正是问题的答案。随着人们越来越智慧，他们对超自然的能力的认识，还有超自然能力和他们所期待的结果之间的因果关系会变化，也就是很多人不再认为是超自然的能力在左右他们，所以 B 有了新的认识是正确答案。
8. 选 **D**。排除法，原文第二句问 Why did theater develop，接着给出了两个原因，一个是人们乐于模仿，一个是人们想要把现实理想化，A 答案对应原文倒数第二句 objectify their anxieties and fears，B 答案对应第二个原因，C 答案对应第一个原因，所以 D 没说。
9. 选 **A**。正如上题所解释的那样，先问了一个问题 Why did theater develop，接着给出了两个原因，所以答案是 A，D 虽然也说了两个理论，但原文没说这两个理论有什么问题，所以 D 错。
10. 选 **B**。pendant 的意思是强烈倾向，嗜好，趣味。原文与 pendant 并列的词是 imitative instinct，对于幻想的什么什么，上面两题都说了人们弄出戏剧的两个原因，一个是模仿，对应这道题里的 imitative instinct，另外一个就是把现实理想化，也就是爱幻想。所以 pendant 应该表示喜欢，喜爱之意。compromise 妥协和 tradition 传统都不靠谱，respect 尊敬有些靠谱，但和 inclination 倾向比起来明显不是正确答案。
11. 选 **C**。修辞题目的题，for example 标志着应该往前看，前面是观点后面是例子。前文说已经给出的两个原因都不对，所以需要额外的解释，那么 for example 之前的句子就是额外的解释。detached view of human problems 指的是人们现实中遇到的问题和戏剧之间的分离，不是演戏的人和社会上其他人的分离，所以 C 对 D 错。
12. 选 **D**。原句转折，说仪式虽然被抛弃了，但随着仪式产生的戏剧却保留了下来。A 是条件，错，而且原文说 rites 没保留，A 反了；B 和 A 错的原因类似，首先因果关系错，其次 myths 没抛弃，说反了；C 也错在抛弃了 myths，与原文相反，D 正确。
13. 选 **D**。待插入句中有 listener 和 storyteller，所以必须插在原文 storytelling 句之后，A 和 B 排除，C 的 under this theory 说明前面必须得有一个理论，Storytelling has been proposed as one alternative 刚好是个理论，所以过渡紧密，不插入任何句子，答案应该是 D，而且 pleasures 和待插入句中的 enjoyment 重复。
14. 选 **BEF**。原文没说 storyteller 会到处走，所以 A 选项不对；B 选项对应第一段倒数第二句，解释见第四题，正确；原文第二段第四句说人越来越聪明之后，对超自然力量的认识会变化，没说好事越来越多，C 选项错；D 选项原文没说，错；E 选项对应原文第三段的第二三句，正确；F 选项对应原文第五段提出的那两个原因，解释见第八题，正确。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Timberline Vegetation on Mountains**

The transition from forest to treeless tundra on a mountain slope is often a **dramatic** one. Within a vertical distance of just a few tens of meters, trees disappear as a life-form and are replaced by low shrubs, herbs, and grasses. This rapid zone of transition is called the upper timberline or tree line. In many semiarid areas there is also a lower timberline where the forest passes into steppe or desert at its lower edge, usually because of a lack of moisture.

The upper timberline, like the snow line, is highest in the tropics and lowest in the Polar Regions. It ranges from sea level in the Polar Regions to 4,500 meters in the dry subtropics and 3,500–4,500 meters in the moist tropics. Timberline trees are normally evergreens, suggesting that these have some advantage over deciduous trees (those that lose their leaves) in the extreme environments of the upper timberline. There are some areas, however, where broadleaf deciduous trees form the timberline. Species of birch, for example, may occur at the timberline in parts of the Himalayas.

At the upper timberline the trees begin to become twisted and deformed. This is particularly true for trees in the middle and upper latitudes, which tend to **attain** greater heights on ridges, whereas in the tropics the trees reach their greater heights in the valleys. This is because middle- and upper- latitude timberlines are strongly influenced by the duration and depth of the snow cover. As the snow is deeper and lasts longer in the valleys, trees tend to attain greater heights on the ridges, even though **they** are more exposed to high-velocity winds and poor, thin soils there. In the tropics, the valleys appear to be more favorable because they are less **prone** to dry out, they have less frost, and they have deeper soils.

There is still no universally agreed-on explanation for why there should be such a dramatic cessation of tree growth at the upper timberline. Various environmental factors may play a role. Too much snow, for example, can smother trees, and avalanches and snow creep can damage or destroy them. Late-lying snow reduces the effective growing season to the point where seedlings cannot establish themselves. **Wind velocity also increases with altitude and may cause serious stress for trees, as is made evident by the deformed shapes at high altitudes.** Some scientists have proposed that the presence of increasing levels of ultraviolet light with elevation may play a role, while browsing and grazing animals like the ibex may be another contributing factor. Probably the most important environmental factor is temperature, for if the growing season is too short and temperatures are too low, tree shoots and buds cannot mature sufficiently to survive the winter months.

Above the tree line there is a zone that is generally called alpine tundra. ■ Immediately adjacent to the timberline, the tundra consists of a fairly complete cover of low-lying shrubs, herbs, and grasses, while higher up the number and diversity of species decrease until there is much bare ground with occasional mosses and lichens and some prostrate cushion plants. ■ Some plants can even survive in favorable microhabitats above the snow line. The highest plants in the world occur at around 6,100 meters on Makalu in the Himalayas. ■ At this great height, rocks, warmed by the sun, melt small snowdrifts. ■

The most striking characteristic of the plants of the alpine zone is their low growth form. This enables them to avoid the worst rigors of high winds and permits them to make use of the higher temperatures immediately adjacent to the ground surface. In an area where low temperatures are limiting to life, the importance of the additional heat near the surface is crucial. The low growth form can also permit the plants to take advantage of the insulation provided by a winter snow cover. In the equatorial mountains the low growth form is less **prevalent**.

1. The word “dramatic” in the passage is closest in meaning to
  - (A) gradual
  - (B) complex
  - (C) visible
  - (D) striking
2. Where is the lower timberline mentioned in paragraph 1 likely to be found?
  - (A) In an area that has little water
  - (B) In an area that has little sunlight
  - (C) Above a transition area
  - (D) On a mountain that has on upper timberline
3. Which of the following can be inferred from paragraph 1 about both the upper and lower timberlines?
  - (A) Both are treeless zones.
  - (B) Both mark forest boundaries.
  - (C) Both are surrounded by desert areas.
  - (D) Both suffer from a lack of moisture.
4. Paragraph 2 supports which of the following statements about deciduous trees?
  - (A) They cannot grow in cold climates.
  - (B) They do not exist at the upper timberline.
  - (C) They are less likely than evergreens to survive at the upper timberline.
  - (D) They do not require as much moisture as evergreens do.
5. The word “attain” in the passage is closest in meaning to
  - (A) require
  - (B) resist
  - (C) achieve
  - (D) endure
6. The word “they” in the passage refers to
  - (A) valleys
  - (B) trees
  - (C) heights
  - (D) ridges
7. The word “prone” in the passage is closest in meaning to
  - (A) adapted
  - (B) likely
  - (C) difficult
  - (D) resistant
8. According to paragraph 3, which of the following is true of trees in the middle and upper latitudes?
  - (A) Tree growth is negatively affected by the snow cover in valleys
  - (B) Tree growth is greater in valleys than on ridges
  - (C) Tree growth on ridges is not affected by high-velocity winds
  - (D) Tree growth lasts longer in those latitudes than it does in the tropics
9. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Because of their deformed shapes at high altitudes, trees are not likely to be seriously harmed by the strong winds typical of those altitudes.
  - (B) As altitude increases, the velocity of winds increase, leading to a serious decrease in the number of trees found at high altitudes.
  - (C) The deformed shapes of trees at high altitudes show that wind velocity, which increase with altitude, can cause serious hardship for trees.
  - (D) Increased wind velocity at high altitudes deforms the shapes of trees, and this may cause serious stress for trees.

**10. In paragraph 4, what is the author's main purpose in the discussion of the dramatic cessation of tree growth at the upper timberline?**

- (A) To argue that none of several environment factors that are believed to contribute to that phenomenon do in fact play a role in causing it
- (B) To argue in support of one particular explanation of that phenomenon against several competing explanations
- (C) To explain why the primary environmental factor responsible for that phenomenon has not yet been identified
- (D) To present several environmental factors that may contribute to a satisfactory explanation of that phenomenon

**11. The word "prevalent" in the passage is closest in meaning to**

- (A) predictable
- (B) widespread
- (C) successful
- (D) developed

**12. According to paragraph 6, all of the following statements are true of plants in the alpine zone EXCEPT**

- (A) Because they are low, they are less exposed to strong winds.
- (B) Because they are low, the winter snow cover gives them more protection from the extreme cold.
- (C) In the equatorial mountains, they tend to be lower than in mountains elsewhere.
- (D) Their low growth form keeps them closer to the ground, where there is more heat than further up.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This explains how, for example, alpine cushion plants have been found growing at an altitude of 6,180 meters.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

At the timberline, whether upper or lower, there is a profound change in the growth of trees and other plants.

**Answer choices**

- (A) Birch is one of the few species of tree that can survive in the extreme environments of the upper timberline.
- (B) There is no agreement among scientists as to exactly why plant growth is sharply different above and below the upper timberline.
- (C) The temperature at the upper timberline is probably more important in preventing tree growth than factors such as the amount of snowfall or the force of winds.
- (D) The geographical location of an upper timberline has an impact on both the types of trees found there and their physical characteristics.
- (E) High levels of ultraviolet light most likely play a greater role in determining tree growth at the upper timberline than do grazing animals such as the ibex.
- (F) Despite being adjacent to the timberline, the alpine tundra is an area where certain kinds of low trees can endure high winds and very low temperatures.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **D**。dramatic 剧烈的，戏剧化的，就单词本身能够想到 drama 戏剧，所以这个应该是戏剧的形容词，原文后句说在几十米的垂直距离内，树木完全被低矮的灌木和草取代了，所以变化非常剧烈，A 渐渐 B 复杂 C 可见的都不靠谱。
2. 选 **A**。以 lower timberline 做关键词定位至本段最后一句，说有 lower timberline 是因为 a lack of moisture，缺乏湿度，等于 A 选项中的没有水。
3. 选 **B**。分别以 upper timberline 和 lower timberline 为关键词定位至本段倒数两句，不管是 upper timberline 还是 lower timberline 都是快速的过渡带，树还是有的，只是在向草原等等过渡，所以 A 错，既然是过渡，也就是边界了，B 对，C 没说，只有 lower timberline 缺水，所以 D 说 both 错。
4. 选 **C**。以 deciduous trees 做关键词定位至原文的第三句和第四句，根据第四句说有的地方的 timberline 是由落叶树构成的，所以 timberline 上还是有落叶树的，所以选项 A 和 B 说反，D 项 moisture 原文没说，第三句说 timberline 通常是常绿树构成的，第四句说有的时候也出现落叶树，所以常绿树比落叶树出现的概率大，所以 C 正确。
5. 选 **C**。attain 获得，答案是 achieve。
6. 选 **B**。并列句，往前找，找主语，trees 是正确答案，此外，被暴露在大风之下的应该是树，山谷山脊和高度都不靠谱。
7. 选 **B**。prone 可能，倾向于。原文说热带地区山谷是更有利于生长的地方因为那里怎么样干涸，比较有利生长当然不容易干涸，C 和 D 的意思都是能干涸，所以都不对，A 适应不靠谱，所以 B 正确。
8. 选 **A**。以 middle and upper latitudes 做关键词定位至原文第三四两句，说中高纬度地区树木在很大程度上受到积雪覆盖的时长和深度的影响，山谷地区积雪深，时间长，所以树长得不好，所以是 negatively affected，选项 B 和 C 与原文相反，D 违反常识。
9. 选 **C**。原句说风速增加而且会给树木很大压力，已经被 blablabla 证实。A 的因果关系在原文不存在，错；B 数目减少没说到，错；D 把原文非主要成分变成主要成分，改变了原文的结构，错。
10. 选 **D**。以 dramatic cessation of tree growth at the timberline 为关键词定位至本段第一句，说对于这个 cessation 没有统一的解释，接着后面就说了有好多种解释，作者没说他认为哪个对，也没解释为什么没有一致意见，所以答案是 D，提供了多种解释，A 说所有都不对，B 说支持其中一个，C 说解释为什么没有一致意见都错了。
11. 选 **B**。prevalent，流行的，广泛的，选择 widespread，即广泛分布的。
12. 选 **C**。排除法，以 wind 做关键词定位至本段第二句，A 对，不选；以 winter snow cover 做关键词定位至倒数第二句，B 对，不选；以 equatorial mountains 做关键词定位至最后一句，原文说 less prevalent，不那么广泛分布，不是选项 C 所说的低，所以 C 错，选；D 选项与 A 选项在同一句，注意 heat 和 higher temperature 的替换。
13. 选 **D**。这道题如果单纯以 cushion plants 定位插入点的话一定会错，那个 for example 表明待插入句是 around 6100m 的一个例子，应该在 C 和 D 当中选择，而且待插入句中又有 this explains how，就是说正确插入点之前的句子必须是对待插入句意思上的一个解释，插入 C 点的话前面句子和待插入句之间不构成解释关系，所以 D 对。
14. 选 **BDF**。A 选项提到了具体的树种桦树，明显是一个细节选项，不选；B 选项对应第四段首句，正确；C 选项错，原文没有将两者进行比较，即使比较了，也是个细节，不选；D 选项对应第二段的第三句和第三段的首句，正确；E 选项错，原因跟 C 选项一样；F 选项对应原文的最后两句，正确。



## 自我评价

用时： 分 秒

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## The Origins of Cetaceans

It should be obvious that cetaceans—whales, porpoises, and dolphins—are mammals. They breathe through lungs, not through gills, and give birth to live young. Their streamlined bodies, the absence of hind legs, and the presence of a *fluke*\* and *blowhole*\*\* cannot disguise their affinities with land dwelling mammals. However, unlike the cases of sea otters and pinnipeds (seals, sea lions, and walruses, whose limbs are functional both on land and at sea), it is not easy to envision what the first whales looked like. Extinct but already fully marine cetaceans are known from the fossil record. ■ How was the gap between a walking mammal and a swimming whale bridged? ■ Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

■ Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. ■ In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale. The fossil was officially named *Pakicetus* in honor of the country where the discovery was made. *Pakicetus* was found embedded in rocks formed from river deposits that were 52 million years old. The river that formed these deposits was actually not far from an ancient ocean known as the Tethys Sea.

The fossil consists of a complete skull of an archaeocyte, an extinct group of ancestors of modern cetaceans. Although limited to a skull, the *Pakicetus* fossil provides precious details on the origins of cetaceans. The skull is cetacean-like but its jawbones lack the enlarged space that is filled with fat or oil and used for receiving underwater sound in modern whales. *Pakicetus* probably detected sound through the ear opening as in land mammals. The skull also lacks a blowhole, another cetacean adaptation for diving. Other features, however, show experts that *Pakicetus* is a transitional form between a group of extinct flesh-eating mammals, the mesonychids, and cetaceans. It has been suggested that *Pakicetus* fed on fish in shallow water and was not yet adapted for life in the open ocean. It probably bred and gave birth on land.

Another major discovery was made in Egypt in 1989. Several skeletons of another early whale, *Basilosaurus*, were found in sediments left by the Tethys Sea and now exposed in the Sahara desert. This whale lived around 40 million years ago, 12 million years after *Pakicetus*. Many incomplete skeletons were found but they included, for the first time in an archaeocyte, a complete hind leg that features a foot with three tiny toes. Such legs would have been far too small to have supported the 50-foot-long *Basilosaurus* on land. *Basilosaurus* was undoubtedly a fully marine whale with possibly nonfunctional, or vestigial, hind legs.

An even more exciting find was reported in 1994, also from Pakistan. The now extinct whale *Ambulocetus natans* ("the walking whale that swam") lived in the Tethys Sea 49 million years ago. It lived around 3 million years after *Pakicetus* but 9 million before *Basilosaurus*. The fossil luckily includes a good portion of the hind legs. The legs were strong and ended in long feet very much like those of a modern pinniped. The legs were certainly functional both on land and at sea. The whale retained a tail and lacked a fluke, the major means of locomotion in modern cetaceans. **The structure of the backbone shows, however, that *Ambulocetus* swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing.** The large hind legs were used for propulsion in water. On land, where it probably bred and gave birth, *Ambulocetus* may have moved around very much like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea.

\***Fluke:** The two parts that constitute the large triangular tail of a whale

\*\***Blowhole:** A hole in the top of the head used for breathing

1. **In paragraph 1, what does the author say about the presence of a blowhole in cetaceans?**
  - (A) It clearly indicates that cetaceans are mammals.
  - (B) It cannot conceal the fact that cetaceans are mammals.
  - (C) It is the main difference between cetaceans and land-dwelling mammals.
  - (D) It cannot yield clues about the origins of cetaceans.
2. **Which of the following can be inferred from paragraph 1 about early sea otters?**
  - (A) It is not difficult to imagine what they looked like.
  - (B) There were great numbers of them.
  - (C) They lived in the sea only.
  - (D) They did not leave many fossil remains.
3. **The word “precious” in the passage is closest in meaning to**
  - (A) exact
  - (B) scarce
  - (C) valuable
  - (D) initial
4. ***Pakicetus* and modern cetaceans have similar**
  - (A) hearing structures
  - (B) adaptations for diving
  - (C) skull shapes
  - (D) breeding locations
5. **The word “it” in the passage refers to**
  - (A) *Pakicetus*
  - (B) fish
  - (C) life
  - (D) ocean
6. **The word “exposed” in the passage is closest in meaning to**
  - (A) explained
  - (B) visible
  - (C) identified
  - (D) located
7. **The hind leg of *Basilosaurus* was a significant find because it showed that *Basilosaurus***
  - (A) lived later than *Ambulocetus natans*
  - (B) lived at the same time as *Pakicetus*
  - (C) was able to swim well
  - (D) could not have walked on land
8. **It can be inferred that *Basilosaurus* bred and gave birth in which of the following locations**
  - (A) on land
  - (B) both on land and at sea
  - (C) in shallow water
  - (D) in a marine environment
9. **Why does the author use the word “luckily” in mentioning that the *Ambulocetus natans* fossil included hind legs?**
  - (A) Fossil legs of early whales are a rare find.
  - (B) The legs provided important information about the evolution of cetaceans.
  - (C) The discovery allowed scientists to reconstruct a complete skeleton of the whale.
  - (D) Until that time, only the front legs of early whales had been discovered.
10. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Even though *Ambulocetus* swam by moving its body up and down, it did not have a backbone.
  - (B) The backbone of *Ambulocetus*, which allowed it to swim, provides evidence of its missing fluke.
  - (C) Although *Ambulocetus* had no fluke, its backbone structure shows that it swam like modern whales.

- (D) By moving the rear parts of their bodies up and down, modern whales swim in a different way from the way *Ambulocetus* swam.

**11. The word “propulsion” in the passage is closest in meaning to**

- (A) staying afloat
- (B) changing direction
- (C) decreasing weight
- (D) moving forward

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This is a question that has puzzled scientists for ages.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

This passage discusses fossils that help to explain the likely origins of cetaceans—whales, porpoises, and dolphins.

**Answer choices**

- (A) Recent discoveries of fossils have helped to show the link between land mammals and cetaceans.
- (B) The discovery of *Ambulocetus natans* provided evidence for a whale that lived both on land and at sea.
- (C) The skeleton of *Basilosaurus* was found in what had been the Tethys Sea, an area rich in fossil evidence.
- (D) *Pakicetus* is the oldest fossil whale yet to be found.
- (E) Fossils thought to be transitional forms between walking mammals and swimming whales were found.
- (F) *Ambulocetus*’ hind legs were used for propulsion in the water.

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## 参考答案与解析 (摘自 Official Guide)

1. **B.** It is essentially a rephrasing of the statement in paragraph 1 that blowholes cannot disguise cetaceans' affinities with other mammals. The other three choices are refuted, either directly or indirectly, by that paragraph.
2. **A.** Paragraph 1 says that sea otters are unlike early mammals whose appearances are not easy to imagine. By inference, then, the early appearance of sea otters must be easy (or not difficult) to imagine.
3. **C.** Anything that is *precious* is very important and therefore valuable.
4. **C.** Paragraph 3 describes the differences and similarities between *Pakicetus* and modern cetaceans. Sentence 3 of that paragraph states that their skulls are similar. The other three choices describe differences, not similarities.
5. **A.** This is a simple pronoun referent item. Choice A, "*Pakicetus*" is the correct answer. The word *It* here refers to a creature that probably bred and gave birth on land. *Pakicetus* is the only one of the choices to which this could apply.
6. **B.** *Exposed* means "uncovered." A skeleton that is uncovered can be seen. Visible means "can be seen."
7. **D.** Choice D is the best answer because it is the only detail about the skeleton of *Basilosaurus* mentioned in paragraph 4, meaning that it is significant. Choice A is true, but it is not discussed in the detail that choice D is, and does not represent the significance of the discovery. Choice C is not mentioned, and choice B is not mentioned.
8. **D.** That implies that everything it did, including breeding and giving birth, could have been done only in a marine environment.
9. **B.** Paragraph 5 explains that this discovery provided important information to scientists that they might not have been able to obtain without it. Therefore, you can infer that the discovery was a "lucky" one. The passage offers no support for the other choices.
10. **C.** Choice A is not true because *Ambulocetus* did have a backbone. Choice B is not true because the sentence says that the backbone showed how the *Ambulocetus* swam, not that it was missing a fluke. Choice D is untrue because the sentence states that *Ambulocetus* and modern whales swam in the same way.
11. **D.** The whale in the sentence used its hind legs to push itself forward in the water.
12. **B.** The sentence that precedes square B is in the form of a rhetorical question and the inserted sentence explicitly provides a response to it. None of the other sentences preceding squares is a question, so the inserted sentence cannot logically follow any one of them.
13. **ABE.** Choice C, "The skeleton of *Basilosaurus* was found in what had been the Tethys Sea, an area rich in fossil evidence," is true, but it is a minor detail and therefore incorrect. Choice D, "*Pakicetus* is the oldest fossil whale yet to be found," is true, but it is a minor detail and therefore incorrect. Choice F, "*Ambulocetus*' hind legs were used for propulsion in the water," is true, but it is a minor detail and therefore incorrect. Choice A, "Recent discoveries of fossils have helped to show the link between land mammals and cetaceans," is correct because it represents the major idea of the entire passage. The bulk of the passage consists of a discussion of the major discoveries (*Pakicetus*, *Basilosaurus*, and *Ambulocetus*) that show this link. Choice B, "The discovery of *Ambulocetus natans* provided evidence for a whale that lived both on land and at sea," is correct because it is one of the major discoveries cited in the passage in support of the passage's main point, that land mammals and cetaceans are related. Choice E, "Fossils thought to be transitional forms between walking mammals and swimming whales were found," is correct because like choice A, this is a statement of the passage's major theme as stated in paragraph 1: these fossils were "clearly intermediate, or transitional between land mammals and cetaceans." The remainder of the passage discusses these discoveries.

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**Desert Formation**

*Para 1* The deserts, which already occupy approximately a fourth of the Earth's land surface, have in recent decades been increasing at an alarming pace. The expansion of desert-like conditions into areas where they did not previously exist is called desertification. It has been estimated that an additional one-fourth of the Earth's land surface is **threatened** by this process.

*Para 2* Desertification is accomplished primarily through the loss of stabilizing natural vegetation and the subsequent accelerated erosion of the soil by wind and water. In some cases the loose soil is blown completely away, leaving a stony surface. In other cases, the finer particles may be removed, while the sand-sized particles are accumulated to form mobile hills or ridges of sand.

*Para 3* Even in the areas that retain a soil cover, the reduction of vegetation typically results in the loss of the soil's ability to absorb substantial quantities of water. The impact of raindrops on the loose soil tends to transfer fine clay particles into the tiniest soil spaces, sealing them and producing a surface that allows very little water penetration. Water absorption is greatly reduced; consequently runoff is increased, resulting in accelerated erosion rates. The gradual drying of the soil caused by its diminished ability to absorb water results in the further loss of vegetation, so that a cycle of progressive surface deterioration is established.

*Para 4* In some regions, the increase in desert areas is occurring largely as the result of a trend toward drier climatic conditions. Continued gradual global warming has produced an increase in aridity for some areas over the past few thousand years. The process may be accelerated in subsequent decades if global warming resulting from air pollution seriously increases.

*Para 5* There is little doubt, however, that desertification in most areas results primarily from human activities rather than natural processes. The semiarid lands bordering the deserts exist in a **delicate** ecological balance and are limited in their potential to adjust to increased environmental pressures. Expanding populations are subjecting the land to increasing pressures to provide them with food and fuel. In wet periods, the land may be able to respond to these stresses. During the dry periods that are common phenomena along the desert margins, though, the pressure on the land is often far in excess of its diminished capacity, and desertification results.

*Para 6* Four specific activities have been identified as major contributors to the desertification processes: overcultivation, overgrazing, firewood gathering, and overirrigation. The cultivation of crops has expanded into **progressively** drier regions as population densities have grown. These regions are especially likely to have periods of severe dryness, so that crop failures are common. Since the raising of most crops necessitates the prior removal of the natural vegetation, crop failures leave extensive tracts of land **devoid** of a plant cover and susceptible to wind and water erosion.

*Para 7* ■ The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. ■ The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. ■ This is usually followed by the drying of the soil and accelerated erosion. ■

*Para 8* Firewood is the chief fuel used for cooking and heating in many countries. The increased pressures of expanding populations have led to the removal of woody plants so that many cities and towns are surrounded by large areas completely lacking in trees and shrubs. The increasing use of dried animal waste as a substitute fuel has also hurt the soil because this valuable soil conditioner and source of plant nutrients is no longer being returned to the land.

*Para 9* The final major human cause of desertification is soil salinization resulting from overirrigation. Excess water from irrigation sinks down into the water table. If no drainage system exists, the water table rises, bringing dissolved salts to the surface. The water evaporates and the salts are left behind, creating a white crustal layer that prevents air and water from reaching the underlying soil.

*Para 10* **The extreme seriousness of desertification results from the vast areas of land and the tremendous numbers of people affected, as well as from the great difficulty of reversing or even slowing the process.** Once the soil has been removed by erosion, only the passage of centuries or millennia will enable new soil to form. In areas where considerable soil still remains, though, a rigorously enforced program of land protection and cover-crop planting may make it possible to reverse the present deterioration of the surface.

1. The word **“threatened”** in the passage is closest in meaning to
  - (A) restricted
  - (B) endangered
  - (C) prevented
  - (D) rejected
2. According to paragraph 3, the loss of natural vegetation has which of the following consequences for soil?
  - (A) Increased stony content
  - (B) Reduced water absorption
  - (C) Increased numbers of spaces in the soil
  - (D) Reduced water runoff
3. The word **“delicate”** in the passage is closest in meaning to
  - (A) fragile
  - (B) predictable
  - (C) complex
  - (D) valuable
4. According to paragraph 5, in dry periods, border areas have difficulty
  - (A) Adjusting to stresses created by settlement
  - (B) Retaining their fertility after desertification
  - (C) Providing water for irrigating crops
  - (D) Attracting populations in search of food and fuel
5. The word **“progressively”** in the passage is closest in meaning to
  - (A) openly
  - (B) impressively
  - (C) objectively
  - (D) increasingly
6. According to paragraph 6, which of the following is often associated with raising crops?
  - (A) Lack of proper irrigation techniques
  - (B) Failure to plant crops suited to the particular area
  - (C) Removal of the original vegetation
  - (D) Excessive use of dried animal waste
7. The phrase **“devoid of”** in the passage is closest in meaning to
  - (A) consisting of
  - (B) hidden by
  - (C) except for
  - (D) lacking in
8. According to paragraph 9, the ground’s absorption of excess water is a factor in desertification because it can
  - (A) Interfere with the irrigation of land
  - (B) Limit the evaporation of water
  - (C) Require more absorption of air by the soil
  - (D) Bring salts to the surface
9. All of the following are mentioned in the passage as contributing to desertification EXCEPT
  - (A) soil erosion
  - (B) global warming
  - (C) insufficient irrigation
  - (D) the raising of livestock
10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Desertification is a significant problem because it is so hard to reverse and affects large areas of land and great numbers of people.

- (B) Slowing down the process of desertification is difficult because of population growth that has spread over large areas of land.
- (C) The spread of deserts is considered a very serious problem that can be solved only if large numbers of people in various countries are involved in the effort.
- (D) Desertification is extremely hard to reverse unless the population is reduced in the vast areas affected.

**11. It can be inferred from the passage that the author most likely believes which of the following about the future of desertification?**

- (A) Governments will act quickly to control further desertification.
- (B) The factors influencing desertification occur in cycles and will change in the future.
- (C) Desertification will continue to increase.
- (D) Desertification will soon occur in all areas of the world.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Many factors have contributed to the great increase in desertification in recent decades.

**Answer choices**

- (A) Growing human populations and the agricultural demands that come with such growth have upset the ecological balance in some areas and led to the spread of deserts.
- (B) As periods of severe dryness have become more common, failures of a number of different crops have increased.
- (C) Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable.
- (D) Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption.
- (E) Animal dung enriches the soil by providing nutrients for plant growth.
- (F) Grasses are generally the dominant type of natural vegetation in semiarid lands.

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**参考答案与解析 (摘自 Official Guide)**

1. **B.** To *threaten* means to speak or act as if you will cause harm to someone or something. The object of the threat is in danger of being hurt, so the correct answer is choice B, "endangered."
2. **B.** The paragraph explicitly states that the reduction of vegetation greatly reduces water absorption. Choice D, reduced water runoff, explicitly contradicts the paragraph, so it is incorrect. The "spaces in the soil" are mentioned in another context: the paragraph does not say that they increase, so choice C is incorrect. The paragraph does not mention choice A.
3. **A.** *Delicate* has the same meaning as "fragile."
4. **A.** The paragraph says that "expanding populations," or settlement, subject border areas to "pressures," or stress, that the land may not "be able to respond to." Choice B is incorrect because the paragraph does not discuss "fertility" after desertification. Choice C is also incorrect because "irrigation" is not mentioned here. The paragraph mentions "increasing populations" but not the difficulty of "attracting populations," so choice D is incorrect.
5. **D.** *Progressively* as it is used here means "more," and "more" of something means that it is increasing.
6. **C.** Sentence 4 of this paragraph says that "the raising of most crops necessitates the prior removal of the natural vegetation," an explicit statement of answer choice C. Choice A, lack of proper irrigation techniques, is incorrect because the paragraph mentions only "overirrigation" as a cause of desertification. No irrigation "techniques" are discussed. Choices 2 and 4, failure to plant suitable crops and use of animal waste, are not discussed.
7. **D.** *Devoid of* means "without," so the correct answer is choice D, "lacking in." If you lack something that means you are without that thing.
8. **D.** The paragraph says that the final human cause of desertification is salinization resulting from overirrigation. The paragraph goes on to say that the overirrigation causes the water table to rise, bringing salts to the surface. There is no mention of the process "interfering" with or "limiting" irrigation, or of the "amount of air" the soil is required to absorb, so choices A, B, and C are all incorrect.
9. **C.** Choice A, "soil erosion," is explicitly mentioned in paragraph 2 as one of the primary causes of desertification, so it is not the correct answer. Choice B, "global warming," is mentioned as a cause of desertification in paragraph 4, so it is incorrect. Choice D, "raising of livestock," is described in paragraph 7 as another cause of desertification, so it is incorrect. The passage includes excessive irrigation as a cause of desertification, but not its opposite, insufficient irrigation, so that is the correct answer.
10. **A.** Choices B, C, and D are all incorrect because they change the meaning of the highlighted sentence.
11. **C.** The last paragraph of the passage says that slowing or reversing the erosion process will be very difficult, but that it may occur in those areas that are not too affected already if rigorously enforced anti-erosion processes are implemented. Taken together, this suggests that the author is not confident this will happen; therefore, it can be inferred that he thinks erosion will continue. The passage provides no basis for inferring choices A, B, or D.
12. **B.** The inserted sentence refers explicitly to relying on "livestock in certain regions." Those regions are the ones described in the sentence preceding square B, which states that raising livestock is "a major economic activity in semiarid lands." The inserted sentence then explains that this reliance "makes large tracts of land susceptible to overgrazing." The sentence that follows square B goes on to say that "The consequences of an excessive number of livestock grazing in an area are..." Thus, the inserted sentence contains references to both the sentence before square B and the sentence after square B. This is not true of any of the other possible insert points, so square B is correct.
13. **ACD.** Choice B, "As periods of severe dryness have become more common, failures of a number of different crops have increased," is incorrect because it is a supporting detail, not a main idea of the passage. Choice E, "Animal dung enriches the soil by providing nutrients for plant growth," is incorrect because it is contradicted by paragraph 8 of the passage. Choice F, "Grasses are generally the dominant type of natural vegetation in semiarid lands," is incorrect because it is a minor detail, mentioned once in passing in paragraph 7.



## 自我评价

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## Early Cinema

The cinema did not emerge as a form of mass consumption until its technology evolved from the initial “peepshow” format to the point where images were projected on a screen in a darkened theater. In the peepshow format, a film was viewed through a small opening in a machine that was created for that purpose. Thomas Edison’s peepshow device, the Kinetoscope, was introduced to the public in 1894. It was designed for use in Kinetoscope parlors, or arcades, which contained only a few individual machines and permitted only one customer to view a short, 50-foot film at any one time. The first Kinetoscope parlors contained five machines. For the price of 25 cents (or 5 cents per machine), customers moved from machine to machine to watch five different films (or, in the case of famous prizefights, successive rounds of a single fight).

These Kinetoscope arcades were modeled on phonograph parlors, which had proven successful for Edison several years earlier. In the phonograph parlors, customers listened to recordings through individual ear tubes, moving from one machine to the next to hear different recorded speeches or pieces of music. The Kinetoscope parlors functioned in a similar way. Edison was more interested in the sale of Kinetoscopes (for roughly \$1,000 apiece) to these parlors than in the films that would be run in them (which cost approximately \$10 to \$15 each). **He refused to develop projection technology, reasoning that if he made and sold projectors, then exhibitors would purchase only one machine—a projector—from him instead of several.**

■ Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. ■ About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison’s former assistant, William Dickson) perfected projection devices. ■ These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. ■

With the advent of projection in 1895–1896, motion pictures became the ultimate form of mass consumption. Previously, large audiences had viewed spectacles at the theater, where vaudeville, popular dramas, musical and minstrel shows, classical plays, lectures, and slide-and-lantern shows had been presented to several hundred spectators at a time. But the movies differed significantly from these other forms of entertainment, which depended on either live performance or (in the case of the slide and- lantern shows) the active involvement of a master of ceremonies who assembled the final program.

Although early exhibitors regularly accompanied movies with live acts, the substance of the movies themselves is mass-produced, prerecorded material that can easily be reproduced by theaters with little or no active participation by the exhibitor. Even though early exhibitors shaped their film programs by mixing films and other entertainments together in whichever way they thought would be most attractive to audiences or by accompanying them with lectures, their creative control remained limited. What audiences came to see was the technological marvel of the movies; the lifelike reproduction of the commonplace motion of trains, of waves striking the shore, and of people walking in the street; and the magic made possible by trick photography and the manipulation of the camera.

With the advent of projection, the viewer’s relationship with the image was no longer private, as it had been with earlier peepshow devices such as the Kinetoscope and the Mutoscope, which was a similar machine that reproduced motion by means of successive images on individual photographic cards instead of on strips of celluloid. It suddenly became public—an experience that the viewer shared with dozens, scores, and even hundreds of others. At the same time, the image that the spectator looked at expanded from the minuscule peepshow dimensions of 1 or 2 inches (in height) to the life-size proportions of 6 or 9 feet.

1. **According to paragraph 1, all of the following were true of viewing films in Kinetoscope parlors EXCEPT**
  - (A) One individual at a time viewed a film.
  - (B) Customers could view one film after another.
  - (C) Prizefights were the most popular subjects for films.
  - (D) Each film was short.
2. **The author discusses phonograph parlors in paragraph 2 in order to**
  - (A) Explain Edison's financial success
  - (B) Describe the model used to design Kinetoscope parlors
  - (C) Contrast their popularity to that of Kinetoscope parlors
  - (D) Illustrate how much more technologically advanced Kinetoscope parlors were
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.**
  - (A) Edison was more interested in developing a variety of machines than in developing a technology based on only one.
  - (B) Edison refused to work on projection technology because he did not think exhibitors would replace their projectors with newer machines.
  - (C) Edison did not want to develop projection technology because it limited the number of machines he could sell.
  - (D) Edison would not develop projection technology unless exhibitors agreed to purchase more than one projector from him.
4. **The word "readily" in the passage is closest in meaning to**
  - (A) frequently
  - (B) easily
  - (C) intelligently
  - (D) obviously
5. **The word "assistance" in the passage is closest in meaning to**
  - (A) criticism
  - (B) leadership
  - (C) help
  - (D) approval
6. **According to paragraph 4, how did the early movies differ from previous spectacles that were presented to large audiences?**
  - (A) They were a more expensive form of entertainment.
  - (B) They were viewed by larger audiences.
  - (C) They were more educational.
  - (D) They did not require live entertainers.
7. **According to paragraph 5, what role did early exhibitors play in the presentation of movies in theaters?**
  - (A) They decided how to combine various components of the film program.
  - (B) They advised film-makers on appropriate movie content.
  - (C) They often took part in the live-action performances.
  - (D) They produced and prerecorded the material that was shown in the theaters.
8. **Which of the following is mentioned in paragraph 6 as one of the ways the Mutoscope differed from the Kinetoscope?**
  - (A) Sound and motion were simultaneously produced in the Mutoscope.
  - (B) More than one person could view the images at the same time with the Mutoscope.
  - (C) The Mutoscope was a less sophisticated earlier prototype of the Kinetoscope.
  - (D) A different type of material was used to produce the images used in the Mutoscope.
9. **The word "It" in the passage refers to**
  - (A) The advent of projection

- (B) The viewer's relationship with the image
- (C) A similar machine
- (D) Celluloid

**10. According to paragraph 6, the images seen by viewers in the earlier peepshows, compared to the images projected on the screen, were relatively**

- (A) Small in size
- (B) Inexpensive to create
- (C) Unfocused
- (D) Limited in subject matter

**11. The word "expanded" in the passage is closest in meaning to**

- (A) was enlarged
- (B) was improved
- (C) was varied
- (D) was rejected

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope."

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The technology for modern cinema evolved at the end of the nineteenth century.

**Answer choices**

- (A) Kinetoscope parlors for viewing films were modeled on phonograph parlors.
- (B) Thomas Edison's design of the Kinetoscope inspired the development of large screen projection.
- (C) Early cinema allowed individuals to use special machines to view films privately.
- (D) Slide-and-lantern shows had been presented to audiences of hundreds of spectators.
- (E) The development of projection technology made it possible to project images on a large screen.
- (F) Once film images could be projected, the cinema became form of mass consumption.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**参考答案与解析 (摘自 Official Guide)**

1. **C.** The paragraph does mention that one viewer at a time could view the films (choice A), that films could be viewed one after another (choice B), and that films were short (choice D). Prizefights are mentioned as one subject of these short films, but not necessarily the most popular one.
2. **B.** The author is explaining why Edison designed his arcades like phonograph parlors; that design had been successful for him in the past. The paragraph does not mention the phonograph parlors to explain Edison's financial success, so choice A is incorrect. The paragraph does not directly discuss the situations described in choices C and D, so those answers too are incorrect.
3. **C.** Choice A says that Edison was more interested in developing a variety of machines, which is not true. Choice B says that the reason Edison refused to work on projection technology was that exhibitors would never replace the projectors. That also is not true; the highlighted sentence implies that he refused to do this because he wanted exhibitors to buy several Kinetoscope machines at a time instead of a single projector. Choice D says that Edison refused to develop projection technology unless exhibitors agreed to purchase more than one projector from him. The highlighted sentence actually says that Edison had already reasoned or concluded that exhibitors would not buy more than one, so choice D is a change in essential meaning.
4. **B.** *Readily* means "easily," so choice B is the correct answer.
5. **C.** An *assistant* is a person who helps a leader.
6. **D.** Early movies were different from previous spectacles because they did not require live actors. So the fact that previous spectacles depended on live performances is explicitly stated as one of the ways (but not the only way) that those earlier entertainments differed from movies. The other answer choices are not mentioned in the paragraph.
7. **A.** The other choices, while possibly true, are not explicitly mentioned in the paragraph as being among the exhibitors' roles.
8. **D.** The paragraph says that these machines were very similar but that they differed in one particular way.
9. **B.** This is a simple-pronoun referent item. The sentence says that "It" suddenly became "public," which implies that whatever "It" is, it was formerly private. The paragraph says that the "viewer's relationship to the image was no longer private," so that relationship is the "It" referred to here.
10. **A.** The paragraph says that the images expanded from an inch or two to life-size proportions, so "small in size" must be correct. The paragraph does not mention the other choices.
11. **A.** If something *expanded*, it grew or got bigger. "Enlarged" also means "grew or got bigger."
12. **D.** The inserted sentence fits best at square D because it represents the final result of the general use of projectors. After projectors became popular, Edison lost money, and although he had previously refused to develop projection technology, now he was forced to do so. To place the sentence anywhere else would interrupt the logical narrative sequence of the events described. None of the sentences in this paragraph can logically follow the inserted sentence, so squares A, B, and C are all incorrect.
13. **CEF.** Choice A, "Kinetoscope parlors for viewing films were modeled on phonograph parlors," is incorrect because, while true, it is a minor detail. The Kinetoscope parlors are described in paragraph 2, but the fact that they were modeled on phonograph parlors is not central to the "evolution" of cinema. Choice B, "Thomas Edison's design of the Kinetoscope inspired the development of large screen projection," is incorrect because it is not clear that it is true, based on the passage. While it may be inferred from paragraph 3 that the Kinetoscope inspired the development of large screen projection, it seems more likely that the pursuit of greater profits is what really inspired large screen projection development. Since this answer is not clearly supported in the passage, it cannot be considered a "main idea" and is incorrect. Choice D, "Slide-and-lantern shows had been presented to audiences of hundreds of spectators," is incorrect because it is a minor detail, mentioned only once in paragraph 4 as part of a larger list of theatrical spectacles.

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## The Long-Term Stability of Ecosystems

Plant communities assemble themselves flexibly, and their particular structure depends on the specific history of the area. Ecologists use the term “succession” to refer to the changes that happen in plant communities and ecosystems over time. The first community in a succession is called a pioneer community, while the long-lived community at the end of succession is called a climax community. Pioneer and successional plant communities are said to change over periods from 1 to 500 years. These changes—in plant numbers and the mix of species—are cumulative. Climax communities themselves change but over periods of time greater than about 500 years.

An ecologist who studies a pond today may well find it relatively unchanged in a year’s time. Individual fish may be replaced, but the number of fish will tend to be the same from one year to the next. We can say that the properties of an ecosystem are more stable than the individual organisms that compose the ecosystem.

At one time, ecologists believed that species diversity made ecosystems stable. They believed that the greater the diversity the more stable the ecosystem. Support for this idea came from the observation that long-lasting climax communities usually have more complex food webs and more species diversity than pioneer communities. Ecologists concluded that the apparent stability of climax ecosystems depended on their complexity. To take an extreme example, farmlands dominated by a single crop are so unstable that one year of bad weather or the invasion of a single pest can destroy the entire crop. In contrast, a complex climax community, such as a temperate forest, will tolerate considerable damage from weather to pests.

The question of ecosystem stability is complicated, however. The first problem is that ecologists do not all agree what “stability” means. Stability can be defined as simply lack of change. In that case, the climax community would be considered the most stable, since, by definition, it changes the least over time. Alternatively, stability can be defined as the speed with which an ecosystem returns to a particular form following a major disturbance, such as a fire. This kind of stability is also called resilience. In that case, climax communities would be the most fragile and the least stable, since they can require hundreds of years to return to the climax state.

Even the kind of stability defined as simple lack of change is not always associated with maximum diversity. At least in temperate zones, maximum diversity is often found in mid-successional stages, not in the climax community. Once a redwood forest matures, for example, the kinds of species and the number of individuals growing on the forest floor are reduced. In general, diversity, by itself, does not ensure stability. Mathematical models of ecosystems likewise suggest that diversity does not guarantee ecosystem stability—just the opposite, in fact. A more complicated system is, in general, more likely than a simple system to break down. A fifteen-speed racing bicycle is more likely to break down than a child’s tricycle.

■ Ecologists are especially interested to know what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities.

■ The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, pales in comparison to the destruction caused by humans. ■ We need to know what aspects of a community are most important to the community’s resistance to destruction, as well as its recovery. ■

**Many ecologists now think that the relative long-term stability of climax communities comes not from diversity but from the “patchiness” of the environment, an environment that varies from place to place supports more kinds of organisms than an environment that is uniform.** A local population that goes extinct is quickly replaced by immigrants from an adjacent community. Even if the new population is of a different species, it can approximately fill the niche vacated by the extinct population and keep the food web intact.

1. The word **“particular”** in the passage is closest in meaning to
  - (A) natural
  - (B) final
  - (C) specific
  - (D) complex
2. According to paragraph 1, which of the following is NOT true of climax communities?
  - (A) They occur at the end of a succession.
  - (B) They last longer than any other type of community.
  - (C) The numbers of plants in them and the mix of species do not change.
  - (D) They remain stable for at least 500 years at a time.
3. According to paragraph 2, which of the following principles of ecosystems can be learned by studying a pond?
  - (A) Ecosystem properties change more slowly than individuals in the system.
  - (B) The stability of an ecosystem tends to change as individuals are replaced.
  - (C) Individual organisms are stable from one year to the next.
  - (D) A change in the members of an organism does not affect an ecosystem’s properties.
4. According to paragraph 3, ecologists once believed that which of the following illustrated the most stable ecosystems?
  - (A) Pioneer communities
  - (B) Climax communities
  - (C) Single-crop farmlands
  - (D) Successional plant communities
5. According to paragraph 4, why is the question of ecosystem stability complicated?
  - (A) The reasons for ecosystem change are not always clear.
  - (B) Ecologists often confuse the word “stability” with the word “resilience.”
  - (C) The exact meaning of the word “stability” is debated by ecologists.
  - (D) There are many different answers to ecological questions.
6. According to paragraph 4, which of the following is true of climax communities?
  - (A) They are more resilient than pioneer communities.
  - (B) They can be considered both the most and the least stable communities.
  - (C) They are stable because they recover quickly after major disturbances.
  - (D) They are the most resilient communities because they change the least over time.
7. Which of the following can be inferred from paragraph 5 about redwood forests?
  - (A) They become less stable as they mature.
  - (B) They support many species when they reach climax.
  - (C) They are found in temperate zones.
  - (D) They have reduced diversity during mid-successional stages.
8. The word **“guarantee”** in the passage is closest in meaning to
  - (A) increase
  - (B) ensure
  - (C) favor
  - (D) complicate
9. In paragraph 5, why does the author provide the information that **“A fifteen-speed racing bicycle is more likely to break down than a child’s tricycle.”**?
  - (A) To illustrate a general principle about the stability of systems by using an everyday example
  - (B) To demonstrate that an understanding of stability in ecosystems can be applied to help understand stability in other situations
  - (C) To make a comparison that supports the claim that, in general, stability increases with diversity
  - (D) To provide an example that contradicts mathematical models of ecosystems
10. The word **“pales”** in the passage is closest in meaning to
  - (A) increases proportionally
  - (B) differs

- (C) loses significance
- (D) is common

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incurred choices change the meaning in important ways or leave out essential information.**

- (A) Ecologists now think that the stability of an environment is a result of diversity rather than patchiness.
- (B) Patchy environments that vary from place to place do not often have high species diversity.
- (C) Uniform environments cannot be climax communities because they do not support as many types of organisms as patchy environments.
- (D) A patchy environment is thought to increase stability because it is able to support a wide variety of organisms.

**12. The word “adjacent” in the passage is closest in meaning to**

- (A) foreign
- (B) stable
- (C) fluid
- (D) neighboring

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In fact, damage to the environment by humans is often much more severe than damage by natural events and processes.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The process of succession and the stability of a climax community can change over time.

**Answer choices**

- (A) The changes that occur in an ecosystem from the pioneer to the climax community can be seen in one human generation.
- (B) A high degree of species diversity does not always result in a stable ecosystem.
- (C) The level of resilience in a plant community contributes to its long-term stability.
- (D) Ecologists agree that climax communities are the most stable types of ecosystems.
- (E) Disagreements over the meaning of the term “stability” make it difficult to identify the most stable ecosystems.
- (F) The resilience of climax communities makes them resistant to destruction caused by humans.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **C**。particular 特别的，答案 specific。
2. 选 **C**。以 climax communities 做关键词定位至原文第三句和最后一句，第三句说明 A 对，不选；最后一句说明 D 对，不选；B 没直说，说其他的 communities 变化周期在 1–500 年，climax 最少是 500 年，说明 climax 最长，B 对，不选。而且最后一句也说了 climax 是变化的，C 说反了，选。
3. 选 **A**。本段非常短，迅速看完之后发现最后一句是结论，说生态系统比组成生态系统的任意单一物种都稳定，A 是答案。
4. 选 **B**。以 ecologists 定位至本段第一句，说生态学家认为生态系统中物种越多越稳定。接着在举例子的時候作者举到了 climax communities，说明生态学家认为 climax communities 最稳定，答案 B。
5. 选 **C**。以 question of ecosystem stability 为关键词定位至本段头两句，说生态学家对于什么是生态系统的稳定性依然存在争议，C 是原文改写。
6. 选 **B**。关于 climax communities 原文有两个地方提到。因为生态学家对什么是稳定这个问题存在两个观点，以不变这种观点看，climax 是最稳定的，以快速恢复这种观点看，climax 是最不稳定的，所以 climax 既稳定也不稳定，B 明确说到两个方面，其它选项都只说到一个方面。
7. 选 **C**。以 redwood forest 做关键词定位至原文第三句，事实上这个 redwood 是前句的一个具体例子，前面句说至少在温带，mid 是最稳定的，不是 climax，紧接着就举了一个 redwood 的例子，可以推断 redwood 是温带植物，C 是答案。A/B/D 都与原文意思相反，而且 B 和 D 基本上意思一样，都不对。
8. 选 **B**。本句中有一个 likewise，说明它与前面句子构成类比，前句说 diversity does not ensure stability，后文的内容几乎和前句一模一样，除了动词被替换，因此 guarantee 的意思就是 ensure。
9. 选 **A**。括号的作用是解释括号之前的文字，前文说系统越复杂越容易坏，后面举了十五速赛车和小孩子的三轮车的例子，三轮车明显比赛车简单，所以就是支持前文，A 正确，C 正好说反，其他都没说。
10. 选 **C**。pale 苍白，使苍白。单词所在句之前说很多 climax communities 都被人类破坏了，也就是强调人的破坏很严重。后面举了个例子，说圣海伦斯火山爆发造船的破坏还没有人类活动的破坏严重，所以 C 选项 lose significance 正确。
11. 选 **D**。原文的结构是生态系统的长期稳定性不是因为 blablabla，而是因为 blablabla，又对这个进行了解释，说物种多；A 说反；B 错，因为原文没有说 patchiness 和 diversity 是矛盾的；C 错，因为原文比较的是 patchiness 和 uniform，而 C 直接将 patchiness 和 climax 进行比较，偷换概念；D 正确，注意原文貌似没有明显的因果关系，因此可能单看句子间关系的话会排除 D，但原文后半句整个是对 patchiness 的一种解释，所以存在不明显的因果关系。
12. 选 **D**。adjacent 是相邻之意，选 neighboring。
13. 选 **B**。根据待插入句中的 human 判断，A/B/C 是可能的，natural events and processes 自然的过程，与第二句中的圣海伦斯火山爆发是同义替换，所以 B/C 可能正确，但按照先理论后实例的原则，正确答案是 B 不是 C。
14. 选 **BCE**。A 选项与原文首段最后一句意思相反，不选；B 选项对应原文第三段和第五段的首句，第四段的最后一句，正确；C 选项对应原文第六段首句，第四段倒数第二第三句，正确；D 选项与原文第三段第四段的首句意思相反，不选；E 选项对应原文第四段第二句，正确；F 选项原文没说，原文第六段说不知道为什么生物群落能抵抗破坏，不选。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Architecture**

Architecture is the art and science of designing structures that organize and enclose space for practical and symbolic purposes. Because architecture grows out of human needs and aspirations, it clearly communicates cultural values. Of all the visual arts, architecture affects our lives most directly for it determines the character of the human environment in major ways.

Architecture is a three-dimensional form. It utilizes space, mass, texture, line, light, and color. To be architecture, a building must achieve a working harmony with a variety of elements. Humans instinctively seek structures that will shelter and enhance their way of life. It is the work of architects to create buildings that are not simply constructions but also offer inspiration and delight. Buildings contribute to human life when they provide shelter, enrich space, complement their site, suit the climate, and are economically feasible. The client who pays for the building and defines its function is an important member of the architectural team. The mediocre design of many contemporary buildings can be traced to both clients and architects.

**In order for the structure to achieve the size and strength necessary to meet its purpose, architecture employs methods of support that, because they are based on physical laws, have changed little since people first discovered them—even while building materials have changed dramatically.** The world's architectural structures have also been devised in relation to the objective limitations of materials. Structures can be analyzed in terms of how they deal with downward forces created by gravity. They are designed to withstand the forces of compression (pushing together), tension (pulling apart), bending, or a combination of these in different parts of the structure.

Even development in architecture has been the result of major technological changes. Materials and methods of construction are integral parts of the design of architecture structures. In earlier times it was necessary to design structural systems suitable for the materials that were available, such as wood, stone, brick. Today technology has progressed to the point where it is possible to invent new building materials to suit the type of structure desired. Enormous changes in materials and techniques of construction within the last few generations have made it possible to enclose space with much greater ease and speed and with a minimum of material. Progress in this area can be measured by the difference in weight between buildings built now and those of comparable size built one hundred years ago.

■ Modern architectural forms generally have three separate components comparable to elements of the human body: a supporting skeleton or frame, an outer skin enclosing the interior spaces, and equipment, similar to the body's vital organs and systems. ■ The equipment includes plumbing, electrical wiring, hot water, and air-conditioning. ■ Of course in early architecture—such as igloos and adobe structures—there was no such equipment, and the skeleton and skin were often one. ■

Much of the world's great architecture has been constructed of stone because of its beauty, permanence, and availability. In the past, whole cities grew from the arduous task of cutting and piling stone upon. Some of the world's finest stone architecture can be seen in the ruins of the ancient Inca city of Machu Picchu high in the eastern Andes Mountains of Peru. The doorways and windows are made possible by placing over the open spaces thick stone beams that support the weight from above. A structural invention had to be made before the physical limitations of stone could be overcome and new architectural forms could be created. That invention was the arch, a curved structure originally made of separate stone or brick segments. The arch was used by the early cultures of the Mediterranean area chiefly for underground drains, but it was the Romans who first developed and used the arch extensively in aboveground structures. Roman builders perfected the semicircular arch made of separate blocks of stone. As a method of spanning space, the arch can support greater weight than a horizontal beam. It works in compression to divert the weight above it out to the sides, where the weight is borne by the vertical elements on either side of the arch. The arch is among the many important structural breakthroughs that have characterized architecture throughout the centuries.

1. **According to paragraph 1, all of the following statements about architecture are true EXCEPT**
  - (A) Architecture is visual art.
  - (B) Architecture reflects the cultural values of its creators.
  - (C) Architecture has both artistic and scientific dimensions.
  - (D) Architecture has an indirect effect on life.
2. **The word “feasible” in the passage is closest in meaning to**
  - (A) in existence
  - (B) without question
  - (C) achievable
  - (D) most likely
3. **The word “enhance” in the passage is closest in meaning to**
  - (A) protect
  - (B) improve
  - (C) organize
  - (D) match
4. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Unchanging physical laws have limited the size and strength of buildings that can be made with materials discovered long ago.
  - (B) Building materials have changed in order to increase architectural size and strength, but physical laws of structure have not changed.
  - (C) When people first started to build, the structural methods used to provide strength and size were inadequate because they were not based on physical laws.
  - (D) Unlike building materials, the methods of support used in architecture have not changed over time because they are based on physical laws.
5. **The word “devised” in the passage is closest in meaning to**
  - (A) combined
  - (B) created
  - (C) introduced
  - (D) suggested
6. **The word “integral” is closest in meaning to**
  - (A) essential
  - (B) variable
  - (C) practical
  - (D) independent
7. **According to paragraph 4, which of the following is true about materials used in the construction of buildings?**
  - (A) Because new building materials are hard to find, construction techniques have changed very little from past generations.
  - (B) The availability of suitable building materials no longer limits the types of structures that may be built.
  - (C) The primary building materials that are available today are wood, stone, and brick.
  - (D) Architects in earlier times did not have enough building materials to enclose large spaces.
8. **In paragraph 4, what does the author imply about modern buildings?**
  - (A) They occupy much less space than buildings constructed one hundred years ago.
  - (B) They are not very different from the building of a few generations ago.
  - (C) They weigh less in relation to their size than buildings constructed one hundred years ago.
  - (D) They take a long time to build as a result of their complex construction methods.
9. **Which of the following correctly characterizes the relationship between the human body and architecture that is described in paragraph 5?**
  - (A) Complex equipment inside buildings is the one element in modern architecture that resembles a component of the human body.

- (B) The components in early buildings were similar to three particular elements of the human body.
- (C) Modern buildings have components that are as likely to change as the human body is.
- (D) In general, modern buildings more closely resemble the human body than earlier buildings do.

**10. The word “arduous” in the passage is closest in meaning to**

- (A) difficult
- (B) necessary
- (C) skilled
- (D) shared

**11. Why does the author include a description of how the “doorways and windows” of Machu Picchu were constructed?**

- (A) To indicate that the combined skeletons and skins of the stone buildings of Machu Picchu were similar to igloos and adobe structures
- (B) To indicate the different kinds of stones that had to be cut to build Machu Picchu
- (C) To provide an illustration of the kind of construction that was required before arches were invented
- (D) To explain how ancient builders reduced the amount of time necessary to construct buildings from stone

**12. According to paragraph 6, which of the following statements is true of the arch?**

- (A) The Romans were the first people to use the stone arch.
- (B) The invention of the arch allowed new architectural forms to be developed.
- (C) The arch worked by distributing the structural load of a building toward the center of the arch.
- (D) The Romans followed earlier practices in their use of arches.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

However, some modern architectural designs, such as those using folded plates of concrete or air-inflated structures, are again unifying skeleton and skin.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Architecture uses forms and space to express cultural values.

**Answer choices**

- (A) Architects seek to create buildings that are both visually appealing and well suited for human use.
- (B) Over the course of the history of building, innovations in material and methods of construction have given architects ever greater freedom to express themselves.
- (C) Throughout history buildings have been constructed like human bodies, needing distinct “organ” systems in order to function.
- (D) Both clients and architects are responsible for the mediocre designs of some modern buildings.
- (E) Modern buildings tend to lack the beauty of ancient stone buildings such as those of Machu Picchu.
- (F) The discovery and use of the arch typifies the way in which architecture advances by developing more efficient types of structures.

### 参考答案与解析

1. 选 **D**。EXCEPT 题排除法，以 visual art 做关键词定位至本段最后一句，A 对，不选；以 cultural values 做关键词定位至第二句，B 对，不选；以 artistic and scientific dimensions 做关键词定位至第一句，C 对，不选；D 选项与 A 选项在同一句，indirect effect 和 directly 说反，错，选。
2. 选 **C**。feasible 可行的，原文说了建筑的若干优点，比如提供遮风避雨的场所，丰富了空间，经济上怎么样，肯定是个正面的词，A 存在中性，错；B 没有问题，虽然是正面但太过，不选，C 正确，D 非常可能虽然正面，但程度不足，不选。
3. 选 **B**。enhance，增强，选 improve，提高。
4. 选 **D**。in order for 只是一个表目的状语，暂时不看，同时 because 那部分插入语不看，整个句子就变成了建筑师们采用的方法是不变的，尽管建筑材料发生了很大变化。A 没说原文的建筑材料发生了很大变化，而且 law 没有限制 size and strength，所以完全不对；B 错在 in order 的那个状语部分，increase 原文没说；C 说 not based on physical laws 与原文相反，错，D 正确。
5. 选 **B**。devise 设计，建筑的产生应该是一个从无到有的过程，所以 B 选项 create 最合适，A 联合 C 介绍，引进 D 建议，表明都不对。
6. 选 **A**。integral 完整的，构成整体的，原文说建筑材料和建筑方法是建筑什么样的部分，代入选项也知道应该是 A 重要的部分，B 可变的 C 实际的都不靠谱，D 独立的虽然意思基本说的通，但明显违反原文，建筑材料和方法应该是互相影响的，不能独立。
7. 选 **B**。以 material 为关键词定位至本段第二句和第三句，说以前必须根据建筑材料来设计建筑，现在我们可以发明新材料，A 说不容易找到新材料，反了；C 的三种材料应该是以前不是现在；D 没说；B 说现在建筑材料充分，不会再影响建筑设计，是原文的意思，正确。
8. 选 **C**。以 modern buildings 做关键词定位至最后一句，说比较现在和一百年前大小相似的建筑的重量我们就能发现建筑技术所取得的进步，也就是以前的重现在的轻。
9. 选 **D**。排除法，A 以 equipment 做关键词定位至第一句的最后半句，equipment 像的应该是 vital organs and systems，不是一个 component；以 early building 做关键词定位至文章最后一句，skeleton 和 skin 是一样的，所以和人不同；C 的 change 原文没说；D 正确因为原文说现代建筑像人体，以前的建筑的 skeleton 和 skin 是一个，所以现代建筑比之前的建筑更像人体。
10. 选 **A**。arduous 艰巨的，困难的，正确答案为 difficult。
11. 选 **C**。修辞目的题，读 doorways and windows 所在的一句话，说门窗是通过把承重的石头横梁放在 space 上面形成的，读前一句的时候发现也是个例子，所以不是答案，往下句看，说想克服石头带给建筑的障碍，必须有一个新发明。按照原文，门窗的形成是一种克服石头带来的障碍的一种方法，所以答案是 C。
12. 选 **B**。以 arch 为关键词定位至 that invention was the arch 句，想克服石头带给建筑的障碍，必须有一个新发明，这个发明就是 arch，所以说 arch 的出现使得其他建筑方法成为可能，B 正确。罗马人是第一个把 arch 广泛用在地上建筑的，不是第一个用 arch 的，A 错，也没 follow 前人的方法，D 错；是把压力分散，divert，不是往中点集中，C 说反。
13. 选 **D**。however 和 again unifying 都说明正确插入点之前必须说把 skeleton and skin 分开，所以 A 和 B 不对，C 之后的 such equipment 指代 C 之前的内容，过渡紧密，不适合插入句子，所以 D 是正确答案
14. 选 **ABF**。A 选项对应全文首段首句，正确；B 选项对应第四段第三句和第三段首句，正确；C 选项与第五段首句相反，错；D 选项是细节，不选；E 选项错，因为原文没说现代的建筑不好看，不选；F 选项第六段最后一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

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用时：     分     秒

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**Depletion of the Ogallala Aquifer**

The vast grasslands of the High Plains in the central United States were settled by farmers and ranchers in the 1880s. This region has a semiarid climate, and for 50 years after its settlement, it supported a low-intensity agricultural economy of cattle ranching and wheat farming. In the early twentieth century, however, it was discovered that much of the High Plains was underlain by a huge aquifer (a rock layer containing large quantities of groundwater). This aquifer was named the Ogallala aquifer after the Ogallala Sioux Indians, who once inhabited the region.

The Ogallala aquifer is a sandstone formation that underlies some 583,000 square kilometers of land extending from northwestern Texas to southern South Dakota. Water from rains and melting snows has been accumulating in the Ogallala for the past 30,000 years. **Estimates indicate that the aquifer contains enough water to fill Lake Huron, but unfortunately, under the semiarid climatic conditions that presently exist in the region, rates of addition to the aquifer are minimal, amounting to about half a centimeter a year.**

The first wells were drilled into the Ogallala during the drought years of the early 1930s. The ensuing rapid expansion of irrigation agriculture, especially from the 1950s onward, transformed the economy of the region. More than 100,000 wells now tap the Ogallala. Modern irrigation devices, each capable of spraying 4.5 million liters of water a day, have produced a landscape dominated by geometric patterns of circular green islands of crops. Ogallala water has enabled the High Plains region to supply significant amounts of the cotton, sorghum, wheat, and corn grown in the United States. In addition, 40 percent of American grain-fed beef cattle are fattened here.

This unprecedented development of a finite groundwater resource with an almost negligible natural recharge rate—that is, virtually no natural water source to replenish the water supply—has caused water tables in the region to fall drastically. In the 1930s, wells encountered plentiful water at a depth of about 15 meters; currently, they must be dug to depths of 45 to 60 meters or more. In places, the water table is declining at a rate of a meter a year, necessitating the periodic deepening of wells and the use of ever-more-powerful pumps. It is estimated that at current withdrawal rates, much of the aquifer will run dry within 40 years. The situation is most critical in Texas, where the climate is driest, the greatest amount of water is being pumped, and the aquifer contains the least water. It is projected that the remaining Ogallala water will, by the year 2030, support only 35 to 40 percent of the irrigated acreage in Texas that is supported in 1980.

The reaction of farmers to the inevitable depletion of the Ogallala varies. Many have been attempting to conserve water by irrigating less frequently or by switching to crops that require less water. ■ Others, however, have adopted the philosophy that it is best to use the water while it is still economically profitable to do so and to concentrate on high-value crops such as cotton. ■ The incentive of the farmers who wish to conserve water is reduced by their knowledge that many of their neighbors are profiting by using great amounts of water, and in the process are drawing down the entire region's water supplies. ■

In the face of the upcoming water supply crisis, a number of grandiose schemes have been developed to transport vast quantities of water by canal or pipeline from the Mississippi, the Missouri, or the Arkansas rivers. ■ Unfortunately, the cost of water obtained through any of these schemes would increase pumping costs at least tenfold, making the cost of irrigated agricultural products from the region uncompetitive on the national and international markets. Somewhat more promising have been recent experiments for releasing capillary water (water in the soil) above the water table by injecting compressed air into the ground. Even if this process proves successful, however, it would almost triple water costs. Genetic engineering also may provide a partial solution, as new strains of drought-resistant crops continue to be developed. Whatever the final answer to the water crisis may be, it is evident that within the High Plains, irrigation water will never again be the abundant, inexpensive resource it was during the agricultural boom years of the mid-twentieth century.

1. **According to paragraph 1, which of the following statements about the High Plains is true?**
  - (A) Until farmers and ranchers settled there in the 1880s, the High Plains had never been inhabited.
  - (B) The climate of the High Plains is characterized by higher-than-average temperatures.
  - (C) The large aquifer that lies underneath the High Plains was discovered by the Ogallala Sioux Indians.
  - (D) Before the early 1900s there was only a small amount of farming and ranching in the High Plains.
2. **According to paragraph 2, all of the following statements about the Ogallala aquifer are true EXCEPT**
  - (A) The aquifer stretches from South Dakota to Texas.
  - (B) The aquifer's water comes from underground springs.
  - (C) Water has been gathering in the aquifer for 30,000 years.
  - (D) The aquifer's water is stored in a layer of sandstone.
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Despite the current impressive size of the Ogallala aquifer, the region's climate keeps the rates of water addition very small.
  - (B) Although the aquifer has been adding water at the rate of only half a centimeter a year, it will eventually accumulate enough water to fill Lake Huron.
  - (C) Because of the region's present climatic conditions, water is being added each year to the aquifer.
  - (D) Even when the region experiences unfortunate climatic conditions, the rates of addition of water continue to increase.
4. **The word "ensuing" in the passage is closest in meaning to**
  - (A) continuing
  - (B) surprising
  - (C) initial
  - (D) subsequent
5. **In paragraph 3, why does the author provide the information that 40 percent of American cattle are fattened in the High Plains?**
  - (A) To suggest that crop cultivation is not the most important part of the economy of the High Plains
  - (B) To indicate that not all economic activity in the High Plains is dependent on irrigation
  - (C) To provide another example of how water from the Ogallala has transformed the economy of the High Plains
  - (D) To contrast cattle-fattening practices in the High Plains with those used in other region of the United States
6. **The word "unprecedented" in the passage is closest in meaning to**
  - (A) difficult to control
  - (B) without any restriction
  - (C) unlike anything in the past
  - (D) rapidly expanding
7. **The word "virtually" in the passage is closest in meaning to**
  - (A) clearly
  - (B) perhaps
  - (C) frequently
  - (D) almost
8. **According to paragraph 4, all of following are consequences of the heavy use of the Ogallala aquifer for irrigation EXCEPT**
  - (A) The recharge rate of the aquifer is decreasing.
  - (B) Water tables in the region are becoming increasingly lower.
  - (C) Wells now have to be dug to much greater depths than before.
  - (D) Increasingly powerful pumps are needed to draw water from the aquifer.
9. **According to paragraph 4, compared with all other states that use Ogallala water for irrigation, Texas**

- (A) Has the greatest amount of farmland being irrigated with Ogallala water
- (B) Contains the largest amount of Ogallala water underneath the soil
- (C) Is expected to face the worst water supply crisis as the Ogallala runs dry
- (D) Uses the least amount of Ogallala water for its irrigation needs

**10. The word “inevitable” in the passage is closest in meaning to**

- (A) unfortunate
- (B) predictable
- (C) unavoidable
- (D) final

**11. Paragraph 5 mentions which of the following as a source of difficulty for some farmers who try to conserve water?**

- (A) Crops that do not need much water are difficult to grow in the High Plains.
- (B) Farmers who grow crops that need a lot of water make higher profits.
- (C) Irrigating less frequently often leads to crop failure.
- (D) Few farmers are convinced that the aquifer will eventually run dry.

**12. According to paragraph 6, what is the main disadvantage of the proposed plans to transport river water to the High Plains?**

- (A) The rivers cannot supply sufficient water for the farmer’s needs.
- (B) Increased irrigation costs would make the products too expensive.
- (C) The costs of using capillary water for irrigation will increase.
- (D) Farmers will be forced to switch to genetically engineered crops.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

But even if uncooperative farmers were to join in the conservation efforts, this would only delay the depletion of the aquifer.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The Ogallala aquifer is a large underground source of water in the High Plains region of the United States.

**Answer choices**

- (A) The use of the Ogallala for irrigation has allowed the High Plains to become one of the most productive agricultural regions in the United States.
- (B) Given the aquifer’s low recharge rate, its use for irrigation is causing water tables to drop and will eventually lead to its depletion.
- (C) Releasing capillary water and introducing drought-resistant crops are less-promising solutions to the water supply crisis than bringing in river water
- (D) The periodic deepening of wells and the use of more-powerful pumps would help increase the natural recharge rate of the Ogallala.
- (E) In Texas, a great deal of attention is being paid to genetic engineering because it is there that the most critical situation exists.
- (F) Several solutions to the upcoming water supply crisis have been proposed, but none of them promises to keep the costs of irrigation low.

### 参考答案与解析

1. 选 **D**。排除法，以 1880s 做关键词定位至第一句，说 1880s 农牧民定居在 High Plains，没说 1880 前没有人，A 错；以 climate 做关键词定位至第二句，原文说 semiarid，没说温度，B 错；以人名做关键词定位至最后一句，说这个人是 inhibit 在这儿的，没说是他发现的，C 错；D 中 small amount of farming and ranching 和原文中的 low-density 是同义替换，选。
2. 选 **B**。排除法，以两个地名做关键词定位至第一句，A 和 D 都对，不选；以 30000 years 做关键词定位至第二句，C 对，不选；同时可以看到地下水是来自 rain and melting snow，不是泉水，所以 B 错，选。
3. 选 **A**。原文的结构是估计水很多，足以填满休伦湖，但补充的少；A 答案完整地反映了这两个方面，正确；B 强调的点搞反，原句强调的是补充的少，B 强调的是现在的量大；C 的因果关系是原文没有的；D 说补充的持续增长，原文没说。
4. 选 **D**。ensue 跟随，接下来，所以 subsequent 是答案。注意 continuing 是个很大的迷惑项，继续是指一个动作的延续，而接下来是两件事情接着发生。
5. 选 **C**。修辞目的题，40% 明显是一个例子，往前看，说这个地方的水养活了 high plains 地区的很多农作物，in addition 说明进一步，也就是除了农业还有牧业，所以是 C，provide another example，没有说农业和牧业谁重要，A 错；牧业确实不依赖灌溉，但也依赖这个地方的水，所以 B 无关；没有对比，D 错。
6. 选 **C**。unprecedented 史无前例的。此外，ABD 三个选项在意思上有共同点，唯独 C 不同，只要知道 pre 是前就一定选出答案。
7. 选 **D**。virtually 几乎。注意 virtual 有虚拟和真实两个截然相反的意思。如果选除了 almost 之外的三项，都说明可能没水，与原文意思不符。
8. 选 **A**。排除法，分别以 recharge rate, water tables, wells, powerful pumps 做关键词定位至本段前三句，B/C/D 三项在原文中都有说，所以 A 错，选。而且跳出这道题看，随着地下水位的下降，并必须打得更深，水泵必须功率更大，这是一系列的因果关系，只有 A 不是这个因果序列中的。
9. 选 **C**。以 Texas 为关键词定位至倒数第二句，说德州气候最干燥，地下水最少，面临的问题最严峻，C 是原文的同义改写
10. 选 **C**。inevitable 不可避免的、必然发生的。
11. 选 **B**。以 some farmers who try to conserve water 为关键词定位至最后一句，说那些不省水的农民因为没有节约水获得利润，众多选项中只有 B 提到了利润问题，是正确答案。
12. 选 **B**。以 transport water 做关键词定位至本段第一句，第二句开始的 unfortunately 清楚的表明了这句话会说一个运水产生的问题，就是成本太贵，使产品价格失去竞争力，B 和 C 提到成本，而只有 B 提到了产品价格升高，正确。
13. 选 **C**。两个决定点，第一个是 uncooperative farmers，那些不合作的农民，根据这个点，A 和 C 是可能的答案，第二个点就是 even if 的让步，既然待插入句说即使那些人愿意合作，正确插入点之前就必须的说那些人不合作，所以 C 是正确答案，而且 A 前后的 many 一句和 other 一句衔接很紧密，不插入句子。
14. 选 **ABF**。A 选项对应原文第三段第二句，改变了当地经济，正确；B 选项对应原文第四、第五段首句，正确；C 选项与原文意思相反，但即使正确也是细节，不选；D 选项原文没说，不选，即使说了也是细节，不选；E 选项太细节，不选；F 选项对应原文第六段第一句，正确。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。



## 自我评价

用时： 分 秒

难度：易 / 中 / 难

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## Deer Populations of the Puget Sound

Two species of deer have been prevalent in the Puget Sound area of Washington State in the Pacific Northwest of the United States. The black-tailed deer, a lowland, west-side cousin of the mule deer of eastern Washington, is now the most common. The other species, the Columbian white-tailed deer, in earlier times was common in the open prairie country; it is now restricted to the low, marshy islands and flood plains along the lower Columbia River.

Nearly any kind of plant of the forest understory can be part of a deer's diet. Where the forest **inhibits** the growth of grass and other meadow plants, the black-tailed deer browses on huckleberry, salal, dogwood, and almost any other shrub or herb. But this is fair-weather feeding. What keeps the black-tailed deer alive in the harsher seasons of plant decay and dormancy? One compensation for not hibernating is the built-in urge to migrate. ■ Deer may move from high-elevation browse areas in summer down to the lowland areas in late fall. ■ Even with snow on the ground, the high bushy understory is exposed; also snow and wind bring down leafy branches of cedar, hemlock, red alder, and other arboreal fodder.

■ The numbers of deer have fluctuated markedly since the entry of Europeans into Puget Sound country. ■ The early explorers and settlers told of abundant deer in the early 1800s and yet almost in the same breath bemoaned the lack of this succulent game animal. Famous explorers of the North American frontier, Lewis and Clark arrived at the mouth of the Columbia River on November 14, 1805, in nearly starved circumstances. They had experienced great difficulty finding game west of the Rockies and not until the second of December did they kill their first elk. To keep 40 people alive that winter, they consumed approximately 150 elk and 20 deer. And when game moved out of the lowlands in early spring, the expedition decided to return east rather than face possible starvation. Later on in the early years of the nineteenth century, when Fort Vancouver became the headquarters of the Hudson's Bay Company, deer populations continued to fluctuate. David Douglas, Scottish botanical explorer of the 1830s, found a disturbing change in the animal life around the fort during the period between his first visit in 1825 and his final contact with the fort in 1832. A recent Douglas biographer states: "The deer which once picturesquely dotted the meadows around the fort were gone [in 1832], hunted to extermination in order to protect the crops."

Reduction in numbers of game should have boded ill for their survival in later times. A worsening of the plight of deer was to be expected as settlers encroached on the land, logging, burning, and clearing, eventually replacing a wilderness landscape with roads, cities, towns, and factories. No doubt the numbers of deer declined still further. Recall the fate of the Columbian white-tailed deer, now in a protected status. But for the black-tailed deer, human pressure has had just the opposite effect. Wildlife zoologist Helmut Buechner(1953), in reviewing the nature of biotic changes in Washington through recorded time, says that "since the early 1940s, the state has had more deer than at any other time in its history, the winter population fluctuating around approximately 320,000 deer (mule and black-tailed deer), which will yield about 65,000 of either sex and any age annually for an indefinite period."

The causes of this population rebound are consequences of other human actions. First, the major predators of deer—wolves, cougar, and lynx—have been greatly reduced in numbers. Second, conservation has been insured by limiting times for and types of hunting. But the most profound reason for the restoration of high population numbers has been the fate of the forests. Great tracts of lowland country deforested by logging, fire, or both have become ideal feeding grounds of deer. **In addition to finding an increase of suitable browse, like huckleberry and vine maple, Arthur Einarsen, longtime game biologist in the Pacific Northwest, found quality of browse in the open areas to be substantially more nutritive.** The protein content of shade-grown vegetation, for example, was much lower than that for plants grown in clearings.

1. **According to paragraph 1, which of the following is true of the white-tailed deer of Puget Sound?**
  - (A) It is native to lowlands and marshes.
  - (B) It is more closely related to the mule deer of eastern Washington than to other types of deer.
  - (C) It has replaced the black-tailed deer in the open prairie.
  - (D) It no longer lives in a particular type of habitat that it once occupied.
2. **It can be inferred from the discussion in paragraph 2 that winter conditions**
  - (A) cause some deer to hibernate
  - (B) make food unavailable in the highlands for deer
  - (C) make it easier for deer to locate understory plants
  - (D) prevent deer from migrating during the winter
3. **The word “inhibits” in the passage is closest in meaning to**
  - (A) consist of
  - (B) combines
  - (C) restricts
  - (D) establishes
4. **The phrase “in the same breath” in the passage is closest in meaning to**
  - (A) impatiently
  - (B) humorously
  - (C) continuously
  - (D) immediately
5. **The author tells the story of the explorers Lewis and Clark in paragraph 3 in order to illustrate which of the following points?**
  - (A) The number of deer within the Puget Sound region has varied over time.
  - (B) Most of the explorers who came to the Puget Sound area were primarily interested in hunting game.
  - (C) There was more game for hunting in the East of the United States than in the West.
  - (D) Individual explorers were not as successful at locating games as were the trading companies.
6. **According to paragraph 3, how had Fort Vancouver changed by the time David Douglas returned in 1832?**
  - (A) The fort had become the headquarters for the Hudson’s Bay Company.
  - (B) Deer had begun populating the meadows around the fort.
  - (C) Deer populations near the fort had been destroyed.
  - (D) Crop yields in the area around the fort had decreased.
7. **Why does the author ask readers to recall “the fate of the Columbian white-tailed deer” in the discussion of changes in the wilderness landscape?**
  - (A) To provide support for the idea that habitat destruction would lead to population decline
  - (B) To compare how two species of deer caused biotic changes in the wilderness environment
  - (C) To provide an example of a species of deer that has successfully adapted to human settlement
  - (D) To argue that some deer species must be given a protected status
8. **The phrase “indefinite period” in the passage is closest in meaning to period**
  - (A) whose end has not been determined
  - (B) that does not begin when expected
  - (C) that lasts only briefly
  - (D) whose importance remains unknown
9. **Which of the following statements about deer populations is supported by the information in paragraph 4?**
  - (A) Deer populations reached their highest point during the 1940s and then began to decline.
  - (B) The activities of settlers contributed in unexpected ways to the growth of some deer populations in later times.
  - (C) The cleaning of wilderness land for construction caused biotic changes from which the black-tailed deer population has never recovered.
  - (D) Since the 1940s the winter populations of deer have fluctuated more than the summer populations have.

**10. The word “rebound” in the passage is closest in meaning to**

- (A) decline
- (B) recovery
- (C) exchange
- (D) movement

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Arthur Einarsen’s longtime family with the Pacific Northwest helped him discover areas where deer had an increase in suitable browse.
- (B) Arthur Einarsen found that deforested feeding grounds provided deer with more and better food.
- (C) Biologist like Einarsen believe it is important to find additional open areas with suitable browse for deer to inhabit.
- (D) According to Einarsen, huckleberry and vine maple are examples of vegetation that may someday improve the nutrition of deer in the open areas of the Pacific Northwest.

**12. Which of the following is NOT mentioned in paragraph 5 as a factor that has increased deer populations?**

- (A) A reduction in the number of predators
- (B) Restrictions on hunting
- (C) The effects of logging and fire
- (D) Laws that protected feeding grounds of deer

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

There food is available and accessible throughout the winter.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Deer in the Puget Sound area eat a wide variety of foods and migrate seasonally to find food.

**Answer choices**

- (A) The balance of deer species in the Puget Sound region has changed over time, with the Columbian white-tailed deer now outnumbering other types of deer.
- (B) Deer populations naturally fluctuate, but early settlers in the Puget Sound environment caused an overall decline in the deer populations of the areas at that time.
- (C) In the long term, black-tailed deer in the Puget Sound area have benefitted from human activities through the elimination of their natural predators, and more and better food in deforested areas.
- (D) Because Puget Sound deer migrate, it was and still remains difficult to determine accurately how many deer are living at any one time in the western United States.
- (E) Although it was believed that human settlement of the American West would cause the total number of deer to decrease permanently, the opposite has occurred for certain types of deer.
- (F) Wildlife biologists have long been concerned that the loss of forests may create nutritional deficiencies for deer.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **D**。以 white-tailed deer 做关键词定位至最后一句，说白尾鹿过去是什么什么地方的，现在是什么什么地方的，也就是它们的生活环境发生了变化，所以 D 不再在原来的地方生活正确，其他的都没说。
2. 选 **C**。以 winter condition 做关键词，没有，但最后一句有 wind and snow on the ground，就是指冬天了，读这句话，说 understory 会暴露，understory 指的是林下植被，而且还说风会把 blabla 吹开，所以既然挡在上面的东西都被吹走了，结果是林下植被露出地面，前文又说 any plant of 林下植被都是鹿的食物，所以答案 C 正确。A 说 hibernate 冬眠与上文相反，B 原文只说迁徙没说高地上没吃的，即使真没吃的也不一定是冬天引起的，D 说冬天迁徙与上文的 late fall 冲突，也错。
3. 选 **C**。inhibit 抑制。A 组成，B 结合，C 限制，D 建立。所以选 C。
4. 选 **D**。in the same breath 从表面意思上说就是在同一个呼吸的时候，其实能够猜出文中的意思应该是同时或者立刻之意，所以 D 选项 immediately 最可能对。带回原文，说那些人知道 1800 年代有很多鹿，但怎么样他们又因为没有鹿而难过，A 没耐心 B 不幽默都不对，C 持续不能表达当时人们失望的心情，而且原文也没说持续难过，不对。
5. 选 **A**。修辞目的题，往前看，这两个人明显是早期探险家的一个例子，读前句说他们知道原本有很多鹿的但又没找到，很显然这句话不足以作为一个观点，本段中心句说鹿的数量变化很大，这是一个中心，而 A 选项刚好是这个中心，正确。
6. 选 **C**。以人名和时间做关键词定位至最后一句，说那些鹿 gone 了，还有被 hunt 了，所以应该是没有鹿了。B 说反，D 不对，A 没说。
7. 选 **A**。修辞目的题，往前看，前句说 the numbers of deer declined still further，鹿的数量进一步下降，然后才让读者 recall 哥伦比亚白尾鹿的例子，也就是说白尾鹿就是人类破坏生存环境导致鹿群数量下降的一个证明，所以答案 A 正确。
8. 选 **A**。indefinite 意思就是不定的，所以 indefinite period 就是没有限制的时间段，B 没有如期开始 C 非常短 D 不重要都和不定没关系，不靠谱。A 答案说这段时间的尾巴还没定下来，含有不定的意思，正确。
9. 选 **B**。问整个第四段，看首句，而且首句说 reduction in numbers，与问题中的 deer population 重合，说鹿数量的下降预示它们的生存变得艰难，但看选项发现没有与之重合的选项，于是可以继续往下看，下面就说到有的鹿群完蛋了，但同时也有有的鹿群繁盛了，众多答案中只有 B 说到鹿的数量增加，所以答案是 B。当然也可以排除法，A 选项关于 1940s 原文说 early 1940s，跟答案说的 1940s 不一样，错；C 说黑尾鹿没有了，刚好和原文黑尾鹿数量增加相反，错；原文没有冬夏对比，D 错。
10. 选 **B**。rebound 反弹，句中 this 证明与上段的衔接，上段说鹿的数量在下降，但 settlers 的活动却导致黑尾鹿数量上升，所以 rebound 是反弹，recovery 是答案，其他都不对。
11. 选 **B**。原文的结构是，in addition 那部分完全没用，包括后面 like 举的那两个例子，主干部分是那个人发现了 blablabla，longtime 那里是对这个人的一个修饰，B 选项非常好地重复了这个结构。注意 browse 作为名词指牧草，所以主干部分必须提到 food，A 没提到，错；C 虽然提到了，但只是作为 open areas 的修饰，而且也不是 he believe，错；D 把原文的非主干部分提升成改写之后句子的主干，结构改变，错。
12. 选 **D**。排除法，原文第一句就说这段主要就在说鹿群数量增加的原因，然后分别用 first，second 和 but the most 表明了三个原因，分别对应选项 ABC 选项，所以 D 是没说的，选 D。
13. 选 **B**。有三个点，一是副词 there 指一个地点，所以在正确插入点之前必须存在一个地点，按这个来看，只有 B 和 D 有可能；第二和第三个点是待插入句当中的两个名词 food 和 winter，按照上下句有名词重叠的原则，B 对 D 错。
14. 选 **BCE**。A 选项前半句是对的，但后半句与第一段最后两句说反，应该是黑多，错；B 选项对应原文第三段首句和第四段第二三句，正确；C 选项对应原文第五段首句，第二句和第四句，正确；D 选项太细节，不选；E 选项对应原文第四段首句和第五句，正确；F 选项原文没有提及，错。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Cave Art in Europe**

The earliest discovered traces of art are beads and carvings, and then paintings, from sites dating back to the Upper Paleolithic period. We might expect that early artistic efforts would be crude, but the cave paintings of Spain and southern France show a **marked** degree of skill. So do the naturalistic paintings on slabs of stone excavated in southern Africa. Some of those slabs appear to have been painted as much as 28,000 years ago, which suggests that painting in Africa is as old as painting in Europe. But painting may be even older than that. The early Australians may have painted on the walls of rock shelters and cliff faces at least 30,000 years ago, and maybe as much as 60,000 years ago.

The researchers Peter Ucko and Andree Rosenfeld identified three **principal** locations of paintings in the caves of western Europe: (1) in obviously inhabited rock shelters and cave entrances; (2) in galleries immediately off the inhabited areas of caves; and (3) in the inner reaches of caves, whose difficulty of access has been interpreted by some as a sign that magical-religious activities were performed there.

The subjects of the paintings are mostly animals. The paintings rest on bare walls, with no backdrops or environmental **trappings**. **Perhaps, like many contemporary peoples, Upper Paleolithic men and women believed that the drawing of a human image could cause death or injury, and if that were indeed their belief, it might explain why human figures are rarely depicted in cave art.** Another explanation for the focus on animals might be that these people sought to improve their luck at hunting. ■ This theory is suggested by evidence of chips in the painted figures, perhaps made by spears thrown at the drawings. ■ But if improving their hunting luck was the chief motivation for the paintings, it is difficult to explain why only a few show signs of having been speared. ■ Perhaps the paintings were inspired by the need to increase the supply of animals. Cave art seems to have **reached a peak toward the end of the Upper Paleolithic period, when the herds of game were decreasing.** ■

The particular symbolic significance of the cave paintings in southwestern France is more explicitly revealed, perhaps, by the results of a study conducted by researchers Patricia Rice and Ann Paterson. The data they present suggest that the animals portrayed in the cave paintings were mostly the ones that the painters preferred for meat and for materials such as hides. For example, wild cattle (bovines) and horses are portrayed more often than we would expect by chance, probably because they were larger and heavier (meatier) than other animals in the environment. In addition, the paintings mostly portray animals that the painters may have feared the most because of their size, speed, natural weapons such as tusks and horns, and the unpredictability of their behavior. That is, mammoths, bovines, and horses are portrayed more often than deer and reindeer. Thus, the paintings are consistent with the idea that the art is related to the importance of hunting in the economy of Upper Paleolithic people. Consistent with this idea, according to the investigators, is the fact that the art of the cultural period that followed the Upper Paleolithic also seems to reflect how people got their food. But in that period, when getting food no longer depended on hunting large game animals (because they were becoming extinct), the art ceased to focus on portrayals of animals.

Upper Paleolithic art was not confined to cave paintings. Many shafts of spears and similar objects were decorated with figures of animals. The anthropologist Alexander Marshack has an interesting interpretation of some of the engravings made during the Upper Paleolithic. He believes that as far back as 30,000 B.C., hunters may have used a system of notation, engraved on bone and stone, to mark phases of the Moon. If this is true, it would mean that Upper Paleolithic people were capable of complex thought and were consciously aware of their environment. In addition to other artworks, figurines representing the human female in exaggerated form have also been found at Upper Paleolithic sites. It has been suggested that these figurines were an ideal type or an expression of a desire for fertility.

1. The word “marked” in the passage is closest in meaning to
  - (A) considerable
  - (B) surprising
  - (C) limited
  - (D) adequate
2. Paragraph 1 supports which of the following statements about painting in Europe?
  - (A) It is much older than painting in Australia.
  - (B) It is as much as 28,000 years old.
  - (C) It is not as old as painting in southern Africa.
  - (D) It is much more than 30,000 years old.
3. The word “principal” in the passage is closest in meaning to
  - (A) major
  - (B) likely
  - (C) well protected
  - (D) distinct
4. According to paragraph 2, what makes some researchers think that certain cave paintings were connected with magical-religious activities?
  - (A) The paintings were located where many people could easily see them, allowing groups of people to participate in the magical-religious activities.
  - (B) Upper Paleolithic people shared similar beliefs with contemporary peoples who use paintings of animals in their magical-religious rituals.
  - (C) Evidence of magical-religious activities has been found in galleries immediately off the inhabited areas of caves.
  - (D) The paintings were found in hard-to-reach places away from the inhabited parts of the cave.
5. The word “trappings” in the passage is closest in meaning to
  - (A) conditions
  - (B) problems
  - (C) influences
  - (D) decorations
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Upper Paleolithic people, like many contemporary peoples, believed that if they drew a human image in their cave art, it would cause death or injury.
  - (B) Many contemporary people believe that the drawing of a human image can cause death or injury, so they, like Upper Paleolithic people, rarely depicted human figures in their cave art.
  - (C) If Upper Paleolithic people, like many contemporary peoples, believed that the drawing of a human image could cause death or injury, this belief might explain why human figures are rarely depicted in cave art.
  - (D) Although many contemporary peoples believe that the drawing of a human image can cause death or injury, researchers cannot explain why Upper Paleolithic people rarely depicted human figures in their cave art.
7. According to paragraph 3, scholars explained chips in the painted figures of animals by proposing that
  - (A) Upper Paleolithic artists used marks to record the animals they had seen
  - (B) the paintings were inspired by the need to increase the supply of animals for hunting
  - (C) the artists had removed rough spots on the cave walls
  - (D) Upper Paleolithic people used the paintings to increase their luck at hunting
8. Why does the author mention that Upper Paleolithic cave art seemed to have “reached a peak toward the end of the Upper Paleolithic period, when the herds of game were decreasing”?
  - (A) To argue that Upper Paleolithic art ceased to include animals when herds of game became scarce
  - (B) To provide support for the idea that the aim of the paintings was to increase the supply of animals for hunting

- (C) To emphasize the continued improvement in the quality of cave art throughout the Upper Paleolithic period
- (D) To show the direct connection between the decrease in herds of game and the end of the Upper Paleolithic period

**9. According to paragraph 4, scholars believe that wild cattle, horses, and mammoths are the animals most frequently portrayed in cave paintings for all of the following reasons EXCEPT**

- (A) These animals were difficult to hunt because their unpredictable behavior.
- (B) People preferred these animals for their meat and for their skins.
- (C) The painters admired the beauty of these large animals.
- (D) People feared these animals because of their size and speed.

**10. According to paragraph 4, which of the following may best represent the attitude of hunters toward deer and reindeer in the Upper Paleolithic period?**

- (A) Hunters did not fear deer and reindeers as much as they did large game animals such as horses and mammoths.
- (B) Hunters were not interested in hunting deer and reindeer because of their size and speed.
- (C) Hunters preferred the meat and hides of deer and reindeer to those of other animals.
- (D) Hunters avoided deer and reindeer because of their natural weapons, such as horns.

**11. According to paragraph 4, what change is evident in the art of the period following the Upper Paleolithic?**

- (A) This new art starts to depict small animals rather than large ones.
- (B) This new art ceases to reflect the ways in which people obtained their food.
- (C) This new art no longer consists mostly of representations of animals.
- (D) This new art begins to show the importance of hunting to the economy.

**12. According to paragraph 5, which of the following has been used as evidence to suggest that Upper Paleolithic people were capable of complex thought and conscious awareness of their environment?**

- (A) They engraved animal figures on the shafts of spears and other objects.
- (B) They may have used engraved signs to record the phases of the Moon.
- (C) Their figurines represented the human female in exaggerated form.
- (D) They may have used figurines to portray an ideal type or to express a desire for fertility.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Therefore, if the paintings were connected with hunting, some other explanation is needed.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Upper Paleolithic cave paintings in Western Europe are among humanity's earliest artistic efforts.

**Answer choices**

- (A) Researchers have proposed several different explanations for the fact that animals were the most common subjects in the cave paintings.
- (B) The art of the cultural period that followed the Upper Paleolithic ceased to portray large game animals and focused instead on the kinds of animals that people of that period preferred to hunt.
- (C) Some researchers believe that the paintings found in France provide more explicit evidence of their symbolic significance than those found in Spain, southern Africa, and Australia.
- (D) The cave paintings focus on portraying animals without also depicting the natural environments in which these animals are typically found.
- (E) Some researchers have argued that the cave paintings mostly portrayed large animals that provided Upper Paleolithic people with meat and materials.
- (F) Besides cave paintings, Upper Paleolithic people produced several other kinds of artwork, one of which has been thought to provide evidence of complex thought.

### 参考答案与解析

1. 选 **A**。mark 标记, marked 明显的, 显著的。considerable 相当的, 正确。limited 感情色彩反了, surprise 不一定是好, adequate 意思过了。
2. 选 **B**。此题答案中的关键词很容易找, 故使用排除法, 原文一共提到了三个地方岩画的年龄, 南非 28000 年前, 欧洲和南非一样, 澳洲 30000 年前, 所以澳洲老, AD 错; B 说 28000 年前, 原文既然说欧洲和非洲一样, 当然也是 28000 年前, 所以 B 对; C 刚好和原文说反, 错。
3. 选 **A**。principal 主要的, 所以 major 正确。
4. 选 **D**。以 magical-religious activities 做关键词定位至第三个位置, inner reach 和 difficult to access 都说明 D 是正确的, 因为四个答案中只有 D 提到了 hard-to-reach places。
5. 选 **D**。trappings 装饰物, 选项中 problems 问题和 influences 是完全不靠谱的, 注意 condition 选项颇具迷惑性, 但条件跟背景的并列明显不如 D 装饰 decorations 的并列更好。
6. 选 **C**。原文的结构是旧石器时代的人相信 blablabla, 如果真是这样, blablabla。A 选项缺了如果真是这样那部分, 缺失重要信息, 错; B 也犯了同样错误, 而且还偷换原文的陈述对象, 原文说 Upper Paleolithic 的人怎么怎么样, 被 B 换成了现代人怎么怎么样, 错; D 说反了, 不是不能解释, 而是这个是可能的解释, 错。
7. 选 **D**。修辞目的题, 尽管问法不是那么典型, 问作者为什么解释 chips in the painted animal figures, 找到之前的 another explanation 那句, 说这些人把画的重点放在动物身上是为了提升自己在打猎时候的运气, 所以 D 正确。
8. 选 **B**。修辞目的题, 例子所在的那句说当猎物变少的时候, 这样的岩画达到了高峰, 往前看, 之前一句说人们之所以画这样的画是因为想得到更多的猎物, 所以这句话就是证明画画是想要更多的猎物, 答案 B 正确。
9. 选 **C**。排除法, 所有答案集中在这段的二四两句, 第四句说到 A 和 D 两个答案, 第二句说到 B 答案, 原文只是说大的动物多画, 没说是因为画画的人喜欢大动物的美, C 没说, 选。
10. 选 **A**。以 deer 和 reindeer 做关键词定位至原文第五句, 说大的动物比诸如 deer 和 reindeer 这类小动物更多出现在岩画上, 前文说因为怕那些大动物的很多方面才画, 所以 A 对, B 将两个概念杂合到一起, 而且原文没说猎人对 deer 不感兴趣, 错; 第 9 题 B 项对, 所以 10 题 C 项错; 原文说有 horn 的是大型动物, 不是 deer, D 错。
11. 选 **C**。以 following the Upper Paleolithic 做关键词定位至最后两句, 说后来大的动物消失了, 根据之前谁重要画谁的理论, 后面也就不再画动物了, C 正确; 不是不画大动物画小动物是干脆就不画动物, A 错; 还是反映生活的, B 错; D 从来说。
12. 选 **B**。以 complex thought and conscious awareness 做关键词定位至本段第四句, 因为有个代词 it, 说明这句跟前面的第三句有联系, 前一句的具体例子是记录月相, B 正确。
13. 选 **C**。三个过渡点, hunting 说明 D 不可能; some other explanation 说明之前必须有其他的解释, 但这个没用上; 第三个就是 therefore 所表示的因果关系; A 选项后的 this 与上文的指代关系明显, 所以 A 排除; B 选项之前有 spears thrown at drawings, 之后有 having been speared, 过渡紧密, 排除, 所以只有 C 正确, 代入发现后面果然是另外一个 explanation。
14. 选 **AEF**。A 选项对应整个第三段, 提出了三个主要画动物的解释, 正确; B 选项对应第四段尾句, 但这只是一个细节, 不选; C 选项对应第四段首句, 但注意这段的首句不是中心句, 第二句才是, 所以这个答案是个细节, 不选; D 选项原文没说, 不选; E 选项对应原文第四段第二句, 正确; F 选项对应第五段第一句, 正确。

### 笔记区

建议将生词和陌生的语法条目记在这里, 并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Petroleum Resources**

Petroleum, consisting of crude oil and natural gas, seems to originate from organic matter in marine sediment. Microscopic organisms settle to the seafloor and accumulate in marine mud. The organic matter may partially decompose, using up the dissolved oxygen in the sediment. As soon as the oxygen is gone, decay stops and the remaining organic matter is preserved.

**Continued sedimentation—the process of deposits’ settling on the sea bottom—buries the organic matter and subjects it to higher temperatures and pressures, which convert the organic matter to oil and gas.** ■ As muddy sediments are pressed together, the gas and small droplets of oil may be squeezed out of the mud and may move into sandy layers nearby. ■ Over long periods of time (millions of years), accumulations of gas and oil can collect in the sandy layers. ■ Both oil and gas are less dense than water, so they generally tend to rise upward through water-saturated rock and sediment. ■

Oil pools are valuable underground accumulations of oil, and oil fields are regions underlain by one or more oil pools. When an oil pool or field has been discovered, wells are drilled into the ground. Permanent towers, called derricks, used to be built to handle the long sections of drilling pipe. Now portable drilling machines are set up and are then dismantled and removed. When the well reaches a pool, oil usually rises up the well because of its density difference with water beneath it or because of the pressure of expanding gas trapped above it. Although this rise of oil is almost always carefully controlled today, spouts of oil, or gushers, were common in the past. Gas pressure gradually dies out, and oil is pumped from the well. Water or steam may be pumped down adjacent wells to help push the oil out. At a refinery, the crude oil from underground is separated into natural gas, gasoline, kerosene, and various oils. Petrochemicals such as dyes, fertilizer, and plastic are also manufactured from the petroleum.

As oil becomes increasingly difficult to find, the search for it is extended into more-hostile environments. The development of the oil field on the North Slope of Alaska and the construction of the Alaska pipeline are examples of the great expense and difficulty involved in new oil discoveries. Offshore drilling platforms extend the search for oil to the ocean’s continental shelves—those gently sloping submarine regions at the edges of the continents. More than one-quarter of the world’s oil and almost one-fifth of the world’s natural gas come from offshore, even though offshore drilling is six to seven times more expensive than drilling on land. A significant part of this oil and gas comes from under the North Sea between Great Britain and Norway.

Of course, there is far more oil underground than can be recovered. It may be in a pool too small or too far from a potential market to justify the expense of drilling. Some oil lies under regions where drilling is forbidden, such as national parks or other public lands. Even given the best extraction techniques, only about 30 to 40 percent of the oil in a given pool can be brought to the surface. The rest is far too difficult to extract and has to remain underground.

Moreover, getting petroleum out of the ground and from under the sea and to the consumer can create environmental problems anywhere along the line. Pipelines carrying oil can be broken by faults or landslides, causing serious oil spills. Spillage from huge oil-carrying cargo ships, called tankers, involved in collisions or accidental groundings (such as the one off Alaska in 1989) can create oil slicks at sea. Offshore platforms may also lose oil, creating oil slicks that drift ashore and foul the beaches, harming the environment. Sometimes, the ground at an oil field may subside as oil is removed. The Wilmington field near Long Beach, California, has subsided nine meters in 50 years; protective barriers have had to be built to prevent seawater from flooding the area. Finally, the refining and burning of petroleum and its products can cause air pollution. Advancing technology and strict laws, however, are helping control some of these adverse environmental effects.

1. The word “**accumulate**” in the passage is closest in meaning to
  - (A) grow up
  - (B) build up
  - (C) spread out
  - (D) break apart
2. According to paragraph 1, which of the following is true about petroleum formation?
  - (A) Microscopic organisms that live in mud produce crude oil and natural gas.
  - (B) Large amounts of oxygen are needed for petroleum formation to begin.
  - (C) Petroleum is produced when organic material in sediments combines with decaying marine organisms.
  - (D) Petroleum formation appears to begin in marine sediments where organic matter is present.
3. In paragraphs 1 and 2, the author’s primary purpose is to
  - (A) describe how petroleum is formed
  - (B) explain why petroleum formation is a slow process
  - (C) provide evidence that a marine environment is necessary for petroleum formation
  - (D) show that oil commonly occurs in association with gas
4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Higher temperatures and pressures promote sedimentation, which is responsible for petroleum formation.
  - (B) Deposits of sediments on top of organic matter increase the temperature of and pressure on the matter.
  - (C) Increase pressure and heat from the weight of the sediment turn the organic remains into petroleum.
  - (D) The remains of microscopic organisms transform into petroleum once they are buried under mud.
5. The word “**adjacent**” in the passage is closest in meaning to
  - (A) nearby
  - (B) existing
  - (C) special
  - (D) deep
6. Which of the following can be inferred from paragraph 3 about gushers?
  - (A) They make bringing the oil to the surface easier.
  - (B) They signal the presence of huge oil reserves.
  - (C) They waste more oil than they collect.
  - (D) They are unlikely to occur nowadays.
7. Which of the following strategies for oil exploration is described in paragraph 4?
  - (A) Drilling under the ocean’s surface
  - (B) Limiting drilling to accessible locations
  - (C) Using highly sophisticated drilling equipment
  - (D) Constructing technologically advanced drilling platforms
8. What does the development of the Alaskan oil field mentioned in paragraph 4 demonstrate?
  - (A) More oil is extracted from the sea than from land.
  - (B) Drilling for oil requires major financial investments.
  - (C) The global demand for oil has increased over the years.
  - (D) The North Slope of Alaska has substantial amounts of oil.
9. The word “**sloping**” in the passage is closest in meaning to
  - (A) shifting
  - (B) inclining
  - (C) forming
  - (D) rolling
10. According to paragraph 5, the decision to drill for oil depends on all of the following factors EXCEPT

- (A) permission to access the area where oil has been found
- (B) the availability of sufficient quantities of oil in a pool
- (C) the location of the market in relation to the drilling site
- (D) the political situation in the region where drilling would occur

**11. The word “foul” in the passage is closest in meaning to**

- (A) reach
- (B) flood
- (C) pollute
- (D) alter

**12. In paragraph 6, the author’s primary purpose is to**

- (A) provide examples of how oil exploration can endanger the environment
- (B) describe accidents that have occurred when oil activities were in progress
- (C) give an analysis of the effects of oil spills on the environment
- (D) explain how technology and legislation help reduce oil spills

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Unless something acts to halt this migration, these natural resources will eventually reach the surface.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

“Petroleum” is a broad term that includes both crude oil and natural gas.

**Answer choices**

- (A) Petroleum formation is the result of biological as well as chemical activity.
- (B) The difficulty of finding adequate sources of oil on land has resulted in a greater number of offshore drilling sites.
- (C) Petroleum extraction can have a negative impact on the environment.
- (D) Petroleum tends to rise to the surface, since it is lower in density than water.
- (E) Current methods of petroleum extraction enable oil producers to recover about half of the world’s petroleum reserves.
- (F) Accidents involving oil tankers occur when tankers run into shore reefs or collide with other vessels.

### 参考答案与解析

1. 选 **B**。accumulate 累积，所以 build up 正确，注意 grow up 表示长大，这个和累积不是一个概念；break apart 意思反了，grow up 和 spread out 在某种意义上是差不多的，都不对。
2. 选 **D**。以 petroleum formation 做关键词，发现 petroleum originate from blablabla，说石油起源于海洋沉积物当中的有机物，与 D 选项说的完全一致，D 正确；A 错，原文没说 live；B 错，原文没说需要大量氧气，只说用光了氧气之后有机物能够保存；C 错，原文没说 combine。
3. 选 **A**。问两段，分别看两段的开头，第一段开头说石油是怎么开始的，第二段第一句说继续沉积，也就是在延续第一段所说的石油的形成过程，所以 A 正确。
4. 选 **C**。去掉原句中的插入语，原句变成了 sedimentation bury and subject to..., convert to petro, A 错，没说温度压力提升 sedimentation；B 遗漏了重要信息，原句的变成石油没说；C 正确；D 完全没重现原文的重要信息，错。
5. 选 **A**。adjacent 相邻的，临近的，B 存在、C 特殊、D 深都不对。
6. 选 **D**。以 gusher 做关键词定位至本段倒数第四句，说 gusher 在过去是非常普遍的，意思就是现在不普遍了，而且前半句还说仔细控制了，仔细控制的结果就是不再发生了，也能选出 D。
7. 选 **A**。第四段第一句说了 hostile environment，紧接着就用大量文字写了 offshore 石油钻探，第五段也一直在说在那些不能钻石油的地方钻探，所以 A 的 under the ocean's surface 最靠谱；B 说反了；C 的 equipment 和 D 的 platform 都没说。
8. 选 **B**。第二句和第三句说到了阿拉斯加的石油开采是一个例子，great expense and difficulty involved in new oil discoveries，说明使用开采花钱又需要技术，其他选项都没说。
9. 选 **B**。slope 坡，sloping 倾斜的、斜坡的，inclining 倾斜的正确；A 变换的、C 形成的、D 滚动的都不对。
10. 选 **D**。排除法，A 对应第三句，因为有 drilling is forbidden，正确，不选；B 对应倒数第二句，pool，正确，不选；C 项对应第二句，location of the market，正确，不选；D 没说，错，选。
11. 选 **C**。foul 弄脏，污染，污秽的，所以 pollute 正确，A 到达、B 冲刷、D 改变都不对。
12. 选 **A**。问整个第六段，看第一句，说整个从石油开采一直到市场上的任何一环都有可能污染环境，所以 A 是正确答案；只是说有可能污染环境，没说事故，B 不对；原文只是给出事实，没有任何分析，C 错；D 错，因为没说减少污染。
13. 选 **D**。四个过渡点，名词 surface，代词 this migration，代词 these natural resources 和连词 unless，代词 these natural resources 是不能用的，因为被反复提到的 oil and gas 干扰；D 的 move 和 D 的 rise 都可以对应 this migration，而只有 rise 才能对的上 surface，所以选 D 不选 B。
14. 选 **ABC**。A 选项对应原文第一段首句，第一段的倒数两句，正确；B 选项对应原文第四段第三句，正确；C 选项对应原文第六段第一句，正确；D 选项对应第二段最后一句，是个细节，不选；E 选项不选，原文说了 30% – 40%；F 选项原文没说，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Minerals and Plants

Research has shown that certain minerals are required by plants for normal growth and development. The soil is the source of these minerals, which are absorbed by the plant with the water from the soil. Even nitrogen, which is a gas in its elemental state, is normally absorbed from the soil as nitrate ions. Some soils are notoriously deficient in micro nutrients and are therefore unable to support most plant life. So-called serpentine soils, for example, are deficient in calcium, and only plants able to tolerate low levels of this mineral can survive. In modern agriculture, mineral depletion of soils is a major concern, since harvesting crops interrupts the recycling of nutrients back to the soil.

Mineral deficiencies can often be detected by specific symptoms such as chlorosis (loss of chlorophyll resulting in yellow or white leaf tissue), necrosis (isolated dead patches), anthocyanin formation (development of deep red pigmentation of leaves or stem), stunted growth, and development of woody tissue in an herbaceous plant. Soils are most commonly deficient in nitrogen and phosphorus. Nitrogen-deficient plants exhibit many of the symptoms just described. Leaves develop chlorosis; stems are short and slender, and anthocyanin discoloration occurs on stems, petioles, and lower leaf surfaces. Phosphorus-deficient plants are often stunted, with leaves turning a characteristic dark green, often with the accumulation of anthocyanin. Typically, older leaves are affected first as the phosphorus is mobilized to young growing tissue. Iron deficiency is characterized by chlorosis between veins in young leaves.

Much of the research on nutrient deficiencies is based on growing plants hydroponically, that is, in soilless liquid nutrient solutions. This technique allows researchers to create solutions that selectively omit certain nutrients and then observe the resulting effects on the plants. Hydroponics has applications beyond basic research, since it facilitates the growing of greenhouse vegetables during winter. Aeroponics, a technique in which plants are suspended and the roots misted with a nutrient solution, is another method for growing plants without soil.

While mineral deficiencies can limit the growth of plants, an overabundance of certain minerals can be toxic and can also limit growth. Saline soils, which have high concentrations of sodium chloride and other salts, limit plant growth, and research continues to focus on developing salt-tolerant varieties of agricultural crops. Research has focused on the toxic effects of heavy metals such as lead, cadmium, mercury, and aluminum; however, even copper and zinc, which are essential elements, can become toxic in high concentrations. Although most plants cannot survive in these soils, certain plants have the ability to tolerate high levels of these minerals.

Scientists have known for some time that certain plants, called hyperaccumulators, can concentrate minerals at levels a hundredfold or greater than normal. ■ A survey of known hyperaccumulators identified that 75 percent of them amassed nickel, cobalt, copper, zinc, manganese, lead, and cadmium are other minerals of choice. ■ Hyperaccumulators run the entire range of the plant world. ■ They may be herbs, shrubs, or trees. ■ Many members of the mustard family, spurge family, legume family, and grass family are top hyperaccumulators. Many are found in tropical and subtropical areas of the world, where accumulation of high concentrations of metals may afford some protection against plant-eating insects and microbial pathogens.

Only recently have investigators considered using these plants to clean up soil and waste sites that have been contaminated by toxic levels of heavy metals—an environmentally friendly approach known as phytoremediation. **This scenario begins with the planting of hyperaccumulating species in the target area, such as an abandoned mine or an irrigation pond contaminated by runoff.** Toxic minerals would first be absorbed by roots but later relocated to the stem and leaves. A harvest of the shoots would remove the toxic compounds off site to be burned or composted to recover the metal for industrial uses. After several years of cultivation and harvest, the site would be restored at a cost much lower than the price of excavation and reburial, the standard practice for remediation of contaminated soils. For examples, in field trials, the plant alpine pennycress removed zinc and cadmium from soils near a zinc smelter, and Indian mustard, native to Pakistan and India, has been effective in reducing levels of selenium salts by 50 percent in contaminated soils.

1. **According to paragraph 1, what is true of plants that can grow in serpentine soil?**
  - (A) They absorb micronutrients unusually well.
  - (B) They require far less calcium than most plants do.
  - (C) They are able to absorb nitrogen in its elemental state.
  - (D) They are typically crops raised for food.
2. **The word “exhibit” in the passage is closest in meaning to**
  - (A) fight off
  - (B) show
  - (C) cause
  - (D) spread
3. **According to paragraph 2, which of the following symptoms occurs in phosphorus-deficient plants but not in plants deficient in nitrogen or iron?**
  - (A) Chlorosis on leaves
  - (B) Change in leaf pigmentation to a dark shade of green
  - (C) Short, stunted appearance of stems
  - (D) Reddish pigmentation on the leaves or stem
4. **According to paragraph 2, a symptom of iron deficiency is the presence in young leaves of**
  - (A) deep red discoloration between the veins
  - (B) white or yellow tissue between the veins
  - (C) dead spots between the veins
  - (D) characteristic dark green veins
5. **The word “facilitates” in the passage is closest in meaning to**
  - (A) slows down
  - (B) affects
  - (C) make easier
  - (D) focuses on
6. **According to paragraph 3, what is the advantage of hydroponics for research on nutrient deficiencies in plants?**
  - (A) It allows researchers to control what nutrients a plant receives.
  - (B) It allows researchers to observe the growth of a large number of plants simultaneously.
  - (C) It is possible to directly observe the roots of plants.
  - (D) It is unnecessary to keep misting plants with nutrient solutions.
7. **The word “suspended” in the passage is closest in meaning to**
  - (A) grown
  - (B) protected
  - (C) spread out
  - (D) hung
8. **Why does the author mention “herbs”, “shrubs”, and “trees”?**
  - (A) To provide examples of plant types that cannot tolerate high levels of harmful minerals.
  - (B) To show why so many plants are hyperaccumulators.
  - (C) To help explain why hyperaccumulators can be found in so many different places.
  - (D) To emphasize that hyperaccumulators occur in a wide range of plant types.
9. **The word “afford” in the passage is closest in meaning to**
  - (A) offer
  - (B) prevent
  - (C) increase
  - (D) remove
10. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Before considering phytoremediation, hyperaccumulating species of plants local to the target area must be identified.

- (B) The investigation begins with an evaluation of toxic sites in the target area to determine the extent of contamination.
- (C) The first step in phytoremediation is the planting of hyperaccumulating plants in the area to be cleaned up.
- (D) Mines and irrigation ponds can be kept from becoming contaminated by planting hyperaccumulating species in targeted areas.

**11. It can be inferred from paragraph 6 that compared with standard practices for remediation of contaminated soils, phytoremediation**

- (A) does not allow for the use of the removed minerals for industrial purposes
- (B) can be faster to implement
- (C) is equally friendly to the environment
- (D) is less suitable for soils that need to be used within a short period of time

**12. Why does the author mention “Indian mustard”?**

- (A) To warn about possible risks involved in phytoremediation
- (B) To help illustrate the potential of phytoremediation
- (C) To show that hyperaccumulating plants grow in many regions of the world
- (D) To explain how zinc contamination can be reduced

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Certain minerals are more likely to be accumulated in large quantities than others.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Plants need to absorb certain minerals from the soil in adequate quantities for normal growth and development.

**Answer choices**

- (A) Some plants are able to accumulate extremely high levels of certain minerals and thus can be used to clean up soils contaminated with toxic levels of these minerals.
- (B) Though beneficial in lower levels, high levels of salts, other minerals, and heavy metals can be harmful to plants.
- (C) When plants do not absorb sufficient amounts of essential minerals, characteristic abnormalities result.
- (D) Because high concentrations of sodium chloride and other salts limit growth in most plants, much research has been done in an effort to develop salt-tolerant agricultural crops.
- (E) Some plants can tolerate comparatively low levels of certain minerals, but such plants are of little use for recycling nutrients back into depleted soils.
- (F) Mineral deficiencies in many plants can be cured by misting their roots with a nutrient solution or by transferring the plants to a soilless nutrient solution.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。以 *serpentine soil* 做关键词定位至倒数第二句，这种土壤钙质缺乏，只有对钙要求很低的植物可以生存。问题问什么样的植物能够生存，所以 B 正确。A 中 *micronutrients* 没说，C 的 *nitrogen* 和 *elemental state* 与问题无关；D 的 *food* 没说。
2. 选 **B**。*exhibit* 显示，显出，所以 B 的 *show* 正确，A 斗争、D 蔓延完全不对。
3. 选 **B**。以 *phosphorus-deficient plants* 做关键词定位至倒数第二句，说 *phosphorus-deficient*，磷缺乏的植物是容易倒的，并且叶子会变成暗绿色，B 是答案。A 中的 *chlorosis* 萎黄病，变色病没说；C 中的茎很短原文没说；D 中的 *reddish pigmentation* 原文没说。
4. 选 **B**。以 *iron deficiency* 和 *young leaves* 做关键词定位至最后一句，*chlorosis* 变色病，萎黄病，所以 B 项的 *white or yellow tissue* 刚好对上。A 项的 *deep red* 没说；C 的 *dead spots* 原文没说；D 的 *dark green* 是缺乏磷的症状，不对。
5. 选 **C**。*facilitate* 促进，所以 C 的 *makes easier* 正确，A 的 *slow down* 和 B 的 *affect* 都不对，D 的 *focus on* 还不行，必须正向。
6. 选 **A**。以 *nutrient deficiency* 做关键词定位至第一句，但第一句只是给这个无土栽培下了个定义，第二句才开始说好处，使得 *researchers* 能够有意去掉某种营养，然后看效果，也就是 A 说的可以选择让植物吸收什么营养；其他三项完全没说。
7. 选 **D**。*suspend* 悬垂，悬挂，所以 *hung* 是正确答案。原句中 *acropnics* 意思是空气种植法，*acro* 表示悬空，所以后面的解释是把植物怎么样，而且跟后面的 *mist* 并列，*mist* 混合。混合与成长是不能并列的，*grow* 错；同样 *spring* 长出来也不对；*protect* 是完全不靠谱的。
8. 选 **D**。修辞目的题，而且这句话中有个 *they*，指代前文，所以往前看，说 HA 在整个植物界分布广泛，后面的几种植物就是 HA 的例子，所以答案是 D。A 说 *cannot tolerate* 反了；原文没说到原因，所以 BC 都错。
9. 选 **A**。*afford* 买得起，所以 *offer* 提供，给出是正确答案。
10. 选 **C**。原句的结构是这件事始于……在某地，比如……地区。A 中的 *before* 是没说的，原文一直在说这件事开始于什么什么，这件事之前干嘛没说；原文有个很难替换的词 *HAS*，而这个词在 B 答案中没有，所以 B 错；D 把 *such as* 里面的例子变成了句子的主要部分，改变了结构，错。
11. 选 **D**。以 *contaminated soil* 和 *remediation* 做关键词定位至倒数第二句，说经过若干年的耕种与收割之后，那个地方就会恢复，说明没有若干年就不能恢复，所以 D 正确。AC 没有相关信息；B 说反，应该是传统的挖掘方法更快，新的种植物的方法慢。
12. 选 **B**。修辞目的题，*Indian mustard* 做关键词定位至最后一句，这句话整个是个例子，而且之前的那句话也是个例子。再往前就是上题的那句话，也就是说经过若干年耕种与收割，那个地方就会变好，也就是这种方法有用，所以答案 B 正确。
13. 选 **A**。三个过渡点，*certain minerals*, *large quantities* 和代词 *others*，有 *mineral* 的只有 A 和 B 两个选项；带入之后发现 A 是正确的，待插入句说有的矿物比别的矿物更容易沉积，而原文的第二句是待插入句的一种解释，所以应该放在待插入句之后，所以 A 对 B 错。
14. 选 **ABC**。A 选项对应原文第五段和第六段的第一句，正确；B 选项对应原文第四段第一句，正确；C 选项对应原文第二段第一句，正确；D 选项中的因果关系原文没说，而且氯化钠也是个细节，不选；E 选项是第一段的一个细节，不选；F 选项是原文第三段的一个细节，不选。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**The Origin of the Pacific Island People**

The greater Pacific region, traditionally called Oceania, consists of three cultural areas: Melanesia, Micronesia, and Polynesia. Melanesia, in the southwest Pacific, contains the large islands of New Guinea, the Solomons, Vanuatu, and New Caledonia. Micronesia, the area north of Melanesia, consists primarily of small scattered islands. Polynesia is the central Pacific area in the great triangle defined by Hawaii, Easter Island, and New Zealand. Before the arrival of Europeans, the islands in the two largest cultural areas, Polynesia and Micronesia, together contained a population estimated at 700,000.

Speculation on the origin of these Pacific islanders began as soon as outsiders encountered them, in the absence of solid linguistic, archaeological, and biological data, many fanciful and mutually exclusive theories were devised. Pacific islanders are variously thought to have come from North America, South America, Egypt, Israel, and India, as well as Southeast Asia. ■ Many older theories implicitly deprecated the navigational abilities and overall cultural creativity of the Pacific islanders. ■ For example, British anthropologists G. Elliot Smith and W. J. Perry assumed that only Egyptians would have been skilled enough to navigate and colonize the Pacific. ■ They inferred that the Egyptians even crossed the Pacific to found the great civilizations of the New World (North and South America). ■ In 1947 Norwegian adventurer Thor Heyerdahl drifted on a balsa-log raft westward with the winds and currents across the Pacific from South America to prove his theory that Pacific islanders were Native Americans (also called American Indians). Later Heyerdahl suggested that the Pacific was peopled by three migrations: by Native Americans from the Pacific Northwest of North America drifting to Hawaii, by Peruvians drifting to Easter Island, and by Melanesians. In 1969 he crossed the Atlantic in an Egyptian-style reed boat to prove Egyptian influences in the Americas. Contrary to these theorists, the overwhelming evidence of physical anthropology, linguistics, and archaeology shows that the Pacific islanders came from Southeast Asia and were skilled enough as navigators to sail against the prevailing winds and currents.

The basic cultural requirements for the successful colonization of the Pacific islands include the appropriate boat-building, sailing, and navigation skills to get to the islands in the first place, domesticated plants and gardening skills suited to often marginal conditions, and a varied inventory of fishing implements and techniques. It is now generally believed that these prerequisites originated with peoples speaking Austronesian languages (a group of several hundred related languages) and began to emerge in Southeast Asia by about 5000 B.C.E. The culture of that time, based on archaeology and linguistic reconstruction, is assumed to have had a broad inventory of cultivated plants including taro, yams, banana, sugarcane, breadfruit, coconut, sago, and rice. Just as important, the culture also possessed the basic foundation for an effective maritime adaptation, including outrigger canoes and a variety of fishing techniques that could be effective for overseas voyaging.

**Contrary to the arguments of some that much of the Pacific was settled by Polynesians accidentally marooned after being lost and adrift, it seems reasonable that this feat was accomplished by deliberate colonization expeditions that set out fully stocked with food and domesticated plants and animals.**

Detailed studies of the winds and currents using computer simulations suggest that drifting canoes would have been a most unlikely means of colonizing the Pacific. These expeditions were likely driven by population growth and political dynamics on the home islands, as well as the challenge and excitement of exploring unknown waters. Because all Polynesians, Micronesians, and many Melanesians speak Austronesian languages and grow crops derived from Southeast Asia, all these peoples most certainly derived from that region and not the New World or elsewhere. The undisputed pre-Columbian presence in Oceania of the sweet potato, which is a New World domesticate, has sometimes been used to support Heyerdahl's "American Indians in the Pacific" theories. However, this is one plant out of a long list of Southeast Asian domesticates. As Patrick Kirch, an American anthropologist, points out, rather than being brought by rafting South Americans, sweet potatoes might just have easily been brought back by returning Polynesian navigators who could have reached the west coast of South America.

1. **According to paragraph 1, all of the following are true statements about Melanesia, Micronesia, and Polynesia EXCEPT**
  - (A) Collectively, these regions are traditionally known as Oceania.
  - (B) These islands of Micronesia are small and spread out.
  - (C) Hawaii, Easter Island, and New Zealand mark the boundaries of Polynesia.
  - (D) Melanesia is situated to the north of Micronesia.
2. **By stating that the theories are “mutually exclusive” the author means that**
  - (A) if one of the theories is true, then all the others must be false
  - (B) the differences between the theories are unimportant
  - (C) taken together, the theories cover all possibilities
  - (D) the theories support each other
3. **The word “overwhelming” in the passage is closest in meaning to**
  - (A) powerful
  - (B) favorable
  - (C) current
  - (D) reasonable
4. **According to paragraph 2, which of the following led some early researchers to believe that the Pacific islanders originally came from Egypt?**
  - (A) Egyptians were known to have founded other great civilizations.
  - (B) Sailors from other parts of the world were believed to lack the skills needed to travel across the ocean.
  - (C) Linguistic, archaeological, and biological data connected the islands to Egypt.
  - (D) Egyptian accounts claimed responsibility for colonizing the Pacific as well as the Americas.
5. **Which of the following can be inferred from paragraph 2 about early theories of where the first inhabitants of the Pacific islands came from?**
  - (A) They were generally based on solid evidence.
  - (B) They tried to account for the origin of the characteristic features of the languages spoken by Pacific islanders.
  - (C) They assumed that the peoples living in Southeast Asia did not have the skills needed to sail to the Pacific islands.
  - (D) They questioned the ideas of G. Elliot Smith and W. J. Perry.
6. **The word “implements” in the passage is closest in meaning to**
  - (A) skills
  - (B) tools
  - (C) opportunities
  - (D) practices
7. **All of the following are mentioned in paragraph 3 as required for successful colonization of the Pacific islands EXCEPT**
  - (A) knowledge of various Austronesian languages
  - (B) a variety of fishing techniques
  - (C) navigational skills
  - (D) knowledge of plant cultivation
8. **In paragraph 3, why does the author provide information about the types of crops grown and boats used in Southeast Asia during the period around 5000 B.C.E.?**
  - (A) To evaluate the relative importance of agriculture and fishing to early Austronesian peoples
  - (B) To illustrate the effectiveness of archaeological and linguistic methods in discovering details about life in ancient times
  - (C) To contrast living conditions on the continent of Asia with living conditions on the Pacific islands
  - (D) To demonstrate that people from this region had the skills and resources necessary to travel to and survive on the Pacific islands
9. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Some people have argued that the Pacific was settled by traders who became lost while transporting domesticated plants and animals.
- (B) The original Polynesian settlers were probably marooned on the islands, but they may have been joined later by carefully prepared colonization expeditions.
- (C) Although it seems reasonable to believe that colonization expeditions would set out fully stocked, this is contradicted by much of the evidence.
- (D) The settlement of the Pacific islands was probably intentional and well planned rather than accidental as some people have proposed.

**10. The word “undisputed” in the passage is closest in meaning to**

- (A) mysterious
- (B) unexpected
- (C) acknowledged
- (D) significant

**11. According to paragraph 4, which of the following is NOT an explanation for why a group of people might have wanted to colonize the Pacific islands?**

- (A) As their numbers increased, they needed additional territory.
- (B) The winds and currents made the islands easy to reach.
- (C) The political situation at home made emigration desirable.
- (D) They found exploration challenging and exciting.

**12. Why does the author mention the views of “Patrick Kirch”?**

- (A) To present evidence in favor of Heyerdahl’s idea about American Indians reaching Oceania
- (B) To emphasize the familiarity of Pacific islanders with crops from many different regions of the world
- (C) To indicate that supposed proof for Heyerdahl’s theory has an alternative explanation
- (D) To demonstrate that some of the same crops were cultivated in both South America and Oceania

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Later theories concentrate on journeys in the other direction.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Together, Melanesia, Micronesia, and Polynesia make up the region described as the Pacific islands, or Oceania.

**Answer choices**

- (A) The first Europeans to reach the area assumed that the islands’ original inhabitants must have drifted to Oceania, perhaps from Egypt or the Americas.
- (B) It is now believed that the process of colonization required a great deal of skill, determination, and planning and could not have happened by chance.
- (C) Using linguistic and archaeological evidence, anthropologists have determined that the first Pacific islanders were Austronesian people from Southeast Asia.
- (D) New evidence suggests that, rather than being isolated, Pacific islanders engaged in trade and social interaction with peoples living in Southeast Asia.
- (E) Although early colonizers of the islands probably came from agriculture-based societies, they were obliged to adopt an economy based on fishing.
- (F) Computer simulations of the winds and currents in the Pacific have shown that reaching the Pacific islands was probably much easier than previously thought.

## 参考答案与解析

1. 选 **D**。EXCEPT 题，排除法。A 对应第一句第二个逗号之前的部分，正确，不选；B 选项对应第二句，注意 scattered 就是 spread out，所以正确，不选；而且第二句还与 D 选项相反，应该是 Micronesia 在 Melanesia 北面，所以 D 错，选；C 选项对应第三句，正确，不选。
2. 选 **A**。mutual 共同，exclusive 排他的，那 mutually exclusive 的意思就是不相容的，互相矛盾的。
3. 选 **A**。overwhelming 压倒性的。首先原文没提到时间概念，所以 current 不对，原文也没说之前的都不合理，所以 reasonable 不对，favorable 赞同的，倾向的靠谱，但不对。
4. 选 **B**。以 Egypt 和 early researchers 双关键词回原文定位至第四句，说两个人认为只有埃及人有技术能够航行到并且占领太平洋的岛，至于后半句是两个人推断出来的东西，不是答案，所以 A 错 B 对，C 和 D 都没说。
5. 选 **C**。以 early (older) theories 做关键词定位至第三句，说早期的理论认为那些岛民的航海能力不行，紧接着给出例子，就是上一题定位的那句，只有埃及人才有能力航行到并且占领这些岛，所以通过例子证明 C 正确，东南亚人没那个技术航线到这些岛上；原文说没证据，所以 A 反了；B 和 D 都没说。
6. 选 **B**。implement 动词的意思是实施，执行；名词是工具，B 正确。原句中它与它并列的是 technique，所以意思应当与 technique 接近但不相同，所以 A 错；C 和 D 习惯上都不能与 technique 并列。
7. 选 **A**。EXCEPT 题，排除法，BCD 三个答案都在第一句，一上来就说 successful colonization 的条件是 blabla，A 语言的问题是在下一句说的，已经不是条件了，所以 A 错，选。
8. 选 **D**。修辞目的题，以 5000 B.C.E. 为关键词定位至第二句，但事实上关于种的作物的信息在第三句中的 The culture of that time，往第二句看，这些前提条件是说 A 语言的人有的，也就是说 A 有占领太平洋岛屿的能力，正确答案 D。
9. 选 **D**。原句的结构是 contrary to 什么什么，所以只看一半就可以，后半句才是作者的真实意思，说这个 feat 是通过有意的占领完成的。不认识 deliberate 的看后面的解释，说装满了东西，当然是有备而来的。A 说这些人是 lost 到这些岛上来的，反了；B 说两批人，第一批是 lost 的，后来有人装满了东西加入了他们，没说；C 也说 lost，注意 although 后面的文字与句子的真实意思相反。
10. 选 **C**。dispute 争辩，undisputed 无可辩驳的，所以 acknowledged 广为承认的正确，A 神秘的、B 出乎意料的明显不靠谱，significant 指重要，原文没提到这个证据是很重要的，也不对。
11. 选 **B**。EXCEPT 题，排除法，A 选项的 their number increased 对应原文第三句的 population growth；正确，不选；C 的 political situation at home 对应第三句中的 political dynamics on the home islands，正确，不选；D 选项的 challenging and exciting 对应第三句中的 challenge and excitement，正确，不选；B 没说。
12. 选 **C**。修辞目的题，往前看，however 句与前句有紧密的衔接，所以再往前看一句。说甜土豆的出现支持了 H 的理论，紧接着就来了个转折，说明 PK 的观点不支持 H 的观点，A 反了；C 的 alternative explanation 正确；B 和 D 都没说。
13. 选 **D**。两个过渡点，later theories 和 other direction。根据 later theories 看，A 一定不对，老的理论还没说不能出现新的理论；B 后的 for example 和 C 后的 they 都说明这两处的过渡非常紧密，不能插入任何句子，都不对，所以 D 正确；而且 D 之前说从埃及到南美，D 之后说从南美洲出发，刚好对应插入句中的 other direction。
14. 选 **ABC**。A 选项对应原文第二段的前半部分，正确；B 选项对应原文第三段的开头句，正确；C 选项对应原文第二段最后一句，正确；D 选项不对，原文只是说甜土豆可能是从南美带来的，而且还提出可能是岛民自己带回来的，不是什么贸易，不选；E 选项原文没说，不选；F 选项是第四段中的一个细节，不选。

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## The Cambrian Explosion

The geologic timescale is marked by significant geologic and biological events, including the origin of Earth about 4.6 billion years ago, the origin of life about 3.5 billion years ago, the origin of eukaryotic life-forms (living things that have cells with true nuclei) about 1.5 billion years ago, and the origin of animals about 0.6 billion years ago. The last event marks the beginning of the Cambrian period. Animals originated relatively late in the history of Earth—in only the last 10 percent of Earth's history. During a geologically brief 100-million-year period, all modern animal groups (along with other animals that are now extinct) evolved. This rapid origin and diversification of animals is often referred to as "the Cambrian explosion."

Scientists have asked important questions about this explosion for more than a century. Why did it occur so late in the history of Earth? The origin of multicellular forms of life seems a relatively simple step compared to the origin of life itself. Why does the fossil record not document the series of evolutionary changes during the evolution of animals? Why did animal life evolve so quickly? Paleontologists continue to search the fossil record for answers to these questions.

One interpretation regarding the absence of fossils during this important 100-million-year period is that early animals were soft bodied and simply did not fossilize. ■ Fossilization of soft-bodied animals is less likely than fossilization of hard-bodied animals, but it does occur. ■ Conditions that promote fossilization of soft-bodied animals include very rapid covering by sediments that create an environment that discourages decomposition. ■ In fact, fossil beds containing soft-bodied animals have been known for many years. ■

The Ediacara fossil formation, which contains the oldest known animal fossils, consists exclusively of soft-bodied forms. Although named after a site in Australia, the Ediacara formation is worldwide in distribution and dates to Precambrian times. This 700-million-year-old formation gives few clues to the origins of modern animals, however, because paleontologists believe it represents an evolutionary experiment that failed. It contains no ancestors of modern animal groups.

A slightly younger fossil formation containing animal remains is the Tommotian formation, named after a locale in Russia. It dates to the very early Cambrian period, and it also contains only soft-bodied forms. **At one time, the animals present in these fossil beds were assigned to various modern animal groups, but most paleontologists now agree that all Tommotian fossils represent unique body forms that arose in the early Cambrian period and disappeared before the end of the period, leaving no descendants in modern animal groups.**

A third fossil formation containing both soft-bodied and hard-bodied animals provides evidence of the result of the Cambrian explosion. This fossil formation, called the Burgess Shale, is in Yoho National Park in the Canadian Rocky Mountains of British Columbia. Shortly after the Cambrian explosion, mud slides rapidly buried thousands of marine animals under conditions that favored fossilization. These fossil beds provide evidence of about 32 modern animal groups, plus about 20 other animal body forms that are so different from any modern animals that they cannot be assigned to any one of the modern groups. These unassignable animals include a large swimming predator called *Anomalocaris* and a soft-bodied animal called *Wiwaxia*, which ate detritus or algae. The Burgess Shale formation also has fossils of many extinct representatives of modern animal groups. For example, a well-known Burgess Shale animal called *Sidneyia* is a representative of a previously unknown group of arthropods (a category of animals that includes insects, spiders, mites, and crabs).

Fossil formations like the Burgess Shale show that evolution cannot always be thought of as a slow progression. The Cambrian explosion involved rapid evolutionary diversification, followed by the extinction of many unique animals. Why was this evolution so rapid? No one really knows. Many zoologists believe that it was because so many ecological niches were available with virtually no competition from existing species. Will zoologists ever know the evolutionary sequences in the Cambrian explosion? Perhaps another ancient fossil bed of soft-bodied animals from 600-million-year-old seas is awaiting discovery.

1. The word **“significant”** in the passage is closest in meaning to
  - (A) numerous
  - (B) important
  - (C) unexplained
  - (D) sudden
2. The word **“relatively”** in the passage is closest in meaning to
  - (A) surprisingly
  - (B) collectively
  - (C) comparatively
  - (D) characteristically
3. The word **“diversification”** in the passage is closest in meaning to
  - (A) emergence of many varieties
  - (B) steady decline in number
  - (C) gradual increase in body size
  - (D) sudden disappearance
4. The period discussed in the passage is referred to as an **“explosion”** because it
  - (A) occurred 0.6 billion years ago, late in Earth’s history
  - (B) was characterized by the unusually fast evolution of many new life-forms
  - (C) was characterized by widespread animal extinction
  - (D) was characterized by violent volcanic eruptions
5. According to Paragraph 2, which of the following is NOT a question that paleontologists asked about the Cambrian explosion?
  - (A) Why was the origin of life a simple step in Earth’s history?
  - (B) Why did it take so long for multicellular organisms to develop?
  - (C) Why did animal life evolve so rapidly?
  - (D) Why does the fossil record lack evidence of animal evolution during that time?
6. Which of the following best describes the relationship between paragraph 2 and paragraph 3?
  - (A) Paragraph 2 puts forward several scientific claims, one of which is rejected in paragraph 3.
  - (B) Paragraph 2 poses several questions, and paragraph 3 offers a possible answer to one of them.
  - (C) Paragraph 2 presents outdated traditional views, while paragraph 3 presents the current scientific conclusions.
  - (D) Paragraph 2 introduces a generalization that is illustrated by specific examples in paragraph 3.
7. The word **“promote”** in the passage is closest in meaning to
  - (A) compliance
  - (B) prevent
  - (C) encourage
  - (D) affect
8. Which of the following is NOT mentioned in paragraph 4 as being true of the Ediacara formation?
  - (A) It contains fossils that date back to the Precambrian period.
  - (B) It contains only soft-bodied animal fossils.
  - (C) It is located on a single site in Australia.
  - (D) It does not contain any fossils of the ancestors of modern animals.
9. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The animals found in the Tommotian fossil bed were once thought to belong to a variety of modern animal groups, but now they are thought to have descended from a single group.
  - (B) Animals in the Tommotian fossil beds were initially assigned to modern animal groups but are now thought to belong to groups that emerged and died out during the Cambrian period.
  - (C) Though at first they thought otherwise, paleontologists now agree that the animals in the Tommotian have body forms from which modern animals have descended.

- (D) It is unclear whether the Tommotian fossils from the early Cambrian period represent unique body forms or whether they should be assigned to various modern animal groups.

**10. Why does the author mention “*Anomalocans*” and “*Wiwaxia*”?**

- (A) To contrast predators with animals that eat plants such as algae
- (B) To question the effects of rapid mud slides on fossilization
- (C) To suggest that much is still unknown about animals found in the Burgess Shale
- (D) To provide examples of fossils that cannot be assigned to a modern animal group

**11. “*Sidneyia*” is an example of**

- (A) a relative of *Anomalocaris* and *Wiwaxia*
- (B) a previously unknown Burgess Shale animal
- (C) an extinct member of a currently existing category of animals
- (D) an animal that cannot be assigned to any modern animal group

**12. What can be inferred from paragraph 7 about why the Cambrian explosion is so unusual?**

- (A) It generated new ecological niches through the extinction of many unique animals.
- (B) It was a period of rapid evolution, and evolution is often thought of as a slow process.
- (C) It is a period whose evolutionary sequences are clearly marked.
- (D) It generated a very large number of ancient fossil beds containing soft-bodied animals.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

It is relatively rare because the fossilization of soft-bodied animals requires a special environment.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The term “Cambrian explosion” refers to the geologically brief period during which all modern animal groups evolved.

**Answer choices**

- (A) Little is known about the stages of evolution during the Cambrian period, in part because early animals were soft bodied and could fossilize only under particular conditions.
- (B) While animal fossils from before the Cambrian explosion have no modern descendants, many animals that evolved during the Cambrian explosion can be assigned to modern groups.
- (C) The Cambrian period is significant because it marks the emergence of eukaryotic life-forms—organisms that have cells with true nuclei.
- (D) The Ediacara fossil formation provides the most information about the Cambrian explosion, while the earlier, Tommotian and Burgess Shale formations give clues about Precambrian evolution.
- (E) Zoologists are awaiting the discovery of a 600-million-year-old fossil formation in order to be able to form a theory of how animal evolution progressed.
- (F) Although the reasons for the rapid evolution of animals during the Cambrian period are not known, one proposed explanation is an abundance of niches with a lack of competitors.

### 参考答案与解析

1. 选 **B**。significant 显著的，important 正确。
2. 选 **C**。relatively 相对地，所以 comparatively 相对地正确。A 吃惊、B 聚集、D 有特点都不对。
3. 选 **A**。diversification 分化，想到 diverse 多样，所以 A 出现了很多变体正确。原文与之并列的是 origin，有出现的意思，所以 emergence 对得上，B 的 decline 和 D 的 disappear 都说反了，C 的 body size 与原文无关。
4. 选 **B**。以 explosion 定位至第一段最后一句，注意这道题的相关信息不在第二段而是在第一段。说 rapid origin and diversification 所以叫 explosion，所以 B 正确。A 的时间不能作为 explosion 的依据；C 灭绝说反了；D 火山爆发没说。
5. 选 **A**。EXCEPT 题，排除法。A 的 simple step 定位至第三句，但这句话不是一个问题，所以 A 错，选；B 选项的 so long 对应原文第二句的 so late，所以正确，不选，注意不要单纯以 multicellular organism 做关键词，会导致定位错误；C 对应倒数第二句，正确，不选；D 的 lack evidence 对应原文倒数第三句的 not document，正确，不选。
6. 选 **B**。问整段的题，注意各段的开头句；第二段提出了很多问题，而第三段一开始就给了一个 explanation，说明是第二段问第三段答，所以 B 正确。第三段与第二段没有对比或者反对的关系，所以 A 和 C 都不对，也不是详细阐述，D 错。
7. 选 **C**。promote 促进，所以 C 的 encourage 正确。B 的 prevent 和 D 的 affect 都是负面作用，complicate 是使变复杂，都不对。
8. 选 **C**。EXCEPT 题，排除法。A 的 Precambrian 对应第二句，正确，不选；B 的 soft-bodied animals 对应第一句的后半句，正确，不选；注意 exclusively 就是 only 之意；C 的相关信息来自第二句，但第二句说的是 worldwide in distribution，不是只在澳大利亚有，所以 C 说反了，选；D 的 modern animals 对应最后一句，正确；不选。
9. 选 **B**。原句最核心的关系是转折，后半句是作者的真实意思。D 项没有确切结论，原文有，所以 D 错；原文后半句说 T 出现在 C 早期，晚期就没了，也没有后代，A 和 C 都说有后代，错。
10. 选 **D**。A 和 W 是两种 unassignable 动物的例子；前句很清楚说有些动物是不能被分在任何一个 group 里，接着就给了这两种作为例子，所以 D 正确，其他都没说。
11. 选 **C**。修辞目的题，前句说 BS 有很多已经灭绝的动物，它们是现代动物 group 的代表；然后就给出了 S 这个例子，所以 C 正确；不要受到 B 的干扰，原文说 S 是一种以前不知道的 arthropod 的代表，没说是以前不知道的 BS 的代表，所以错。
12. 选 **B**。以 Cambrian Explosion 做关键词定位至第二句，注意倒数第二句也有一个 Cambrian Explosion，但因为与问题无关，所以不读。本句说寒武纪大爆发包含了很多动物的快速出现然后快速灭亡，接着提出问题并给出解答。所以问题中的 unusual 就是说快的不正常，所以答案 B 正确。A 的 new ecological niches 原文没有相关信息；C 原文只是一个问题，C 变成了答案，不对；D 错，原文最后一句说一个 bed，不是很多 beds，而且是 awaiting discovery，不是已经发现了。
13. 选 **B**。两个过渡点，fossilization of soft-bodied animals 和 special environment，凭第一个 ABC 都有可能，但 special environment 说明 A 不对，而且应该先说需要一个特殊的环境然后再说这个环境是什么，而不是反过来。何况 B 点之后的 condition 和插入句中的 environment 刚好对应。
14. 选 **ABF**。A 选项对应原文第三段第一句，正确；B 选项对应原文第五段最后一句和第一段倒数第二句，正确；C 选项把原文的两个不相干的概念杂糅到一起，胡编乱造，不选；D 选项对应第四段第一句，但因为第四段整个是个例子，所以这个是细节，不选；E 选项对应第七段最后一句，但是是细节，不选；F 选项对应原文第七段倒数第三句，正确。

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## Powering the Industrial Revolution

In Britain one of the most dramatic changes of the Industrial Revolution was the harnessing of power. Until the reign of George III (1760–1820), available sources of power for work and travel had not increased since the Middle Ages. There were three sources of power: animal or human muscles; the wind, operating on sail or windmill; and running water. **Only the last of these was suited at all to the continuous operating of machines, and although waterpower abounded in Lancashire and Scotland and ran grain mills as well as textile mills, it had one great disadvantage: streams flowed where nature intended them to, and water-driven factories had to be located on their banks whether or not the location was desirable for other reasons.** Furthermore, even the most reliable waterpower varied with the seasons and disappeared in a drought. The new age of machinery, in short, could not have been born without a new source of both movable and constant power.

The source had long been known but not exploited. Early in the eighteenth century, a pump had come into use in which expanding steam raised a piston in a cylinder, and atmospheric pressure brought it down again when the steam condensed inside the cylinder to form a vacuum. This “atmospheric engine,” invented by Thomas Savery and vastly improved by his partner, Thomas Newcomen, embodied revolutionary principles, but it was so slow and wasteful of fuel that it could not be employed outside the coal mines for which it had been designed. In the 1760s, James Watt perfected a separate condenser for the steam, so that the cylinder did not have to be cooled at every stroke; then he devised a way to make the piston turn a wheel and thus convert reciprocating (back and forth) motion into rotary motion. He thereby transformed an inefficient pump of limited use into a steam engine of a thousand uses. The final step came when steam was introduced into the cylinder to drive the piston backward as well as forward, thereby increasing the speed of the engine and cutting its fuel consumption.

■ Watt’s steam engine soon showed what it could do. ■ It liberated industry from dependence on running water. ■ The engine eliminated water in the mines by driving efficient pumps, which made possible deeper and deeper mining. ■ The ready availability of coal inspired William Murdoch during the 1790s to develop the first new form of nighttime illumination to be discovered in a millennium and a half. Coal gas rivaled smoky oil lamps and flickering candles, and early in the new century, well-to-do Londoners grew accustomed to gaslit houses and even streets. Iron manufacturers, which had starved for fuel while depending on charcoal, also benefited from ever-increasing supplies of coal: blast furnaces with steam-powered bellows turned out more iron and steel for the new machinery. Steam became the motive force of the Industrial Revolution as coal and iron ore were the raw materials.

By 1800 more than a thousand steam engines were in use in the British Isles, and Britain retained a virtual monopoly on steam engine production until the 1830s. Steam power did not merely spin cotton and roll iron; early in the new century, it also multiplied ten times over the amount of paper that a single worker could produce in a day. At the same time, operators of the first printing presses run by steam rather than by hand found it possible to produce a thousand pages in an hour rather than thirty. Steam also promised to eliminate a transportation problem not fully solved by either canal boats or turnpikes. Boats could carry heavy weights, but canals could not cross hilly terrain; turnpikes could cross the hills, but the roadbeds could not stand up under great weights. These problems needed still another solution, and the ingredients for it lay close at hand. In some industrial regions, heavily laden wagons, with flanged wheels, were being hauled by horses along metal rails; and the stationary steam engine was puffing in the factory and mine. Another generation passed before inventors succeeded in combining these ingredients, by putting the engine on wheels and the wheels on the rails, so as to provide a machine to take the place of the horse. Thus the railroad age sprang from what had already happened in the eighteenth century.

1. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Running water was the best power source for factories since it could keep machines operating continuously, but since it was abundant only in Lancashire and Scotland, most mills and factories that were located elsewhere could not be water driven.
  - (B) The disadvantage of using waterpower is that streams do not necessarily flow in places that are the most suitable for factories, which explains why so many water-powered grain and textile mills were located in undesirable places.
  - (C) Since machines could be operated continuously only where running water was abundant, grain and textile mills, as well as other factories, tended to be located only in Lancashire and Scotland.
  - (D) Running water was the only source of power that was suitable for the continuous operation of machines, but to make use of it, factories had to be located where the water was, regardless of whether such locations made sense otherwise.
2. **Which of the following best describes the relation of paragraph 2 to paragraph 1?**
  - (A) Paragraph 2 shows how the problem discussed in paragraph 1 arose.
  - (B) Paragraph 2 explains how the problem presented in paragraph 1 came to be solved.
  - (C) Paragraph 2 provides a more technical discussion of the problem introduced in paragraph 1.
  - (D) Paragraph 2 shows why the problem discussed in paragraph 1 was especially important to solve.
3. **The word “exploited” in the passage is closest in meaning to**
  - (A) utilized
  - (B) recognized
  - (C) examined
  - (D) fully understood
4. **The word “vastly” in the passage is closest in meaning to**
  - (A) quickly
  - (B) ultimately
  - (C) greatly
  - (D) initially
5. **According to paragraph 2, the “atmospheric engine” was slow because**
  - (A) it had been designed to be used in coal mines
  - (B) the cylinder had to cool between each stroke
  - (C) it made use of expanding steam to raise the piston in its cylinder
  - (D) it could be operated only when a large supply of fuel was available
6. **According to paragraph 2, Watt’s steam engine differed from earlier steam engines in each of the following ways EXCEPT**
  - (A) It used steam to move a piston in a cylinder.
  - (B) It worked with greater speed.
  - (C) It was more efficient in its use of fuel.
  - (D) It could be used in many different ways.
7. **In paragraph 3, the author mentions William Murdoch’s invention of a new form of nighttime illumination in order to**
  - (A) indicate one of the important developments made possible by the introduction of Watt’s steam engine
  - (B) make the point that Watt’s steam engine was not the only invention of importance to the Industrial Revolution
  - (C) illustrate how important coal was as a raw material for the Industrial Revolution
  - (D) provide an example of another eighteenth-century invention that used steam as a power source
8. **The phrase “grew accustomed to” in the passage is closest in meaning to**
  - (A) began to prefer
  - (B) wanted to have
  - (C) became used to
  - (D) insisted on

9. The word “retained” in the passage is closest in meaning to

- (A) gained
- (B) established
- (C) profited from
- (D) maintained

10. According to paragraph 4, which of the following statements about steam engines is true?

- (A) They were used for the production of paper but not for printing.
- (B) By 1800, significant numbers of them were produced outside of Britain.
- (C) They were used in factories before they were used to power trains.
- (D) They were used in the construction of canals and turnpikes.

11. According to paragraph 4, providing a machine to take the place of the horse involved combining which two previously separate ingredients?

- (A) Turnpikes and canals
- (B) Stationary steam engines and wagons with flanged wheels
- (C) Metal rails in roadbeds and wagons capable of carrying heavy loads
- (D) Canal boats and heavily laden wagons

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

The factories did not have to go to the streams when power could come to the factories.

Where would the sentence best fit?

13. Directions: An introductory sentence for a brief summary of the passage is provided below.

Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

The Industrial Revolution would not have been possible without a new source of power that was efficient, movable, and continuously available.

Answer choices

- (A) In the early eighteenth century, Savery and Newcomen discovered that expanding steam could be used to raise a piston in a cylinder.
- (B) Watt’s steam engine played a leading role in greatly increasing industrial production of all kinds.
- (C) Until the 1830s, Britain was the world’s major producer of steam engines.
- (D) In the mid-1700s James Watt transformed an inefficient steam pump into a fast, flexible, fuel-efficient engine.
- (E) In the 1790s William Murdoch developed a new way of lighting houses and streets using coal gas.
- (F) The availability of steam engines was a major factor in the development of railroads, which solved a major transportation problem.

### 参考答案与解析

1. 选 **D**。原句很长，首先分析清楚应该断句的地方是第一个逗号，前半句是只有最后一个，也就是前面说的流水能够满足要求；后半句的结构是尽管怎样，有一个很大的缺点，缺点是 blabla；原文说 L 和 S 两个地方水能充足，但没说只有这两个地方充足，AC 错；B 缺失了原文的前半句，属于遗漏重要信息，错。
2. 选 **B**。问第二段与第一段的关系，第一段说了水能的缺点，这是上一题读到的，提出了一个问题；第二段一开始就说这个能源早就发现了，也就是蒸汽。所以两段是一个提出问题，一个提出解决方案，B 对。
3. 选 **A**。exploit 开采，开发，利用，剥削，所以 A 的 utilize 正确，与 B 的 recognize 矛盾；整段都在说怎么用，fully understood 和 examine 的信息都没有，所以都不选。
4. 选 **C**。vastly 巨大地，所以 greatly 正确。A 很快、B 最终、D 开始都不靠谱。
5. 选 **B**。以 atmospheric engine 做关键词，读所在句，说 slow 的地方没给出原因，往下看，说 1760 年瓦特完善了这个蒸汽机，使得每个 stroke 之间不再需要冷却了，也就是说以前的蒸汽机是要冷却的，所以慢，正确答案 B。
6. 选 **A**。排除法，由上题看出，B 是对的，不选；C 的 efficient 和 D 的 many different ways 都可以从倒数第二句中找到，正确，不选；原文没说 A 是和以前的不同的，所以 A 错，选。
7. 选 **A**。修辞目的题，整个 William Murdoch 所在的那句都是一个例子，往前看，之前一句话说这个 engine 能够排水，使得深层开矿成为可能，但还是在说一个机器的作用，不是中心，所以看到中心句，说瓦特的蒸汽机能做很多事情，William Murdoch 的这个东西是一个根据瓦特的东西弄出来的，所以答案 A。
8. 选 **C**。get accustomed to 习惯于，所以 became used to 正确。A 的 prefer 表示比较，前文已经胜过了就没必要再比较了；B 说想要有，同理前文已经说有了；insist on 是坚持，原文没说要改，所以跟坚持无关。
9. 选 **D**。retain 保留，保持，所以 D 的 maintain 正确；选项当中的 gain 和 establish 都有从无到有的意思，而原文从一开始就说英国工业革命成功的原因是利用能源，所以不是从无到有，profit from 从中获利原文没说，错。
10. 选 **C**。问题当中无明显关键词，排除法。第二句的分号之后和第三句说明 A 不对，造纸和印刷都用了蒸汽机；1800 做关键词定位至第一句，说直到 1830 年英国才失去蒸汽机的垄断地位，所以 B 反了；倒数第二句说 another generation passed before 蒸汽机用在铁路上，C 正确；原文提到 canal 和 turnpike 的时候没说蒸汽机用来建设它们。
11. 选 **B**。以 ingredients 定位至倒数第二句，有 combining these ingredients, these 说明答案在前句。前句分别说到蒸汽机和马车，所以答案是 B。
12. 选 **C**。两个过渡点，factories 和 stream，分别对应原文的 industry 和 running water，B 或者 C 正确；但 B 之后的代词 it 指代前文的 Watt's steam engine，过渡紧密，不能插入任何句子，所以 C 正确。
13. 选 **BDF**。A 选项是第二段中的一个细节，不选；B 选项对应原文第三段第一句，或者说整个第三段，正确；C 选项对应第四段第一句，但这句话不是中心句，所以是细节，不选；D 选项对应原文第二段后三句，正确；E 选项是第三段中的一个细节，不选；F 选项对应原文第四段后三句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**自我评价**

用时：     分     秒

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错误：     个

**William Smith**

In 1769 in a little town in Oxfordshire, England, a child with the very ordinary name of William Smith was born into the poor family of a village blacksmith. He received rudimentary village schooling, but mostly he roamed his uncle's farm collecting the fossils that were so abundant in the rocks of the Cotswold Hills. When he grew older, William Smith taught himself surveying from books he bought with his small savings, and at the age of eighteen he was apprenticed to a surveyor of the local parish. He then proceeded to teach himself geology, and when he was twenty-four, he went to work for the company that was excavating the Somerset Coal Canal in the south of England.

This was before the steam locomotive, and canal building was at its height. The companies building the canals to transport coal needed surveyors to help them find the coal deposits worth mining as well as to determine the best courses for the canals. This job gave Smith an opportunity to study the fresh rock outcrops created by the newly dug canal. He later worked on similar jobs across the length and breadth of England, all the while studying the newly revealed strata and collecting all the fossils he could find. Smith used mail coaches to travel as much as 10,000 miles per year. In 1815 he published the first modern geological map, "A Map of the Strata of England and Wales with a Part of Scotland," a map so meticulously researched that it can still be used today.

In 1831 when Smith was finally recognized by the Geological Society of London as the "father of English geology," it was not only for his maps but also for something even more important. Ever since people had begun to catalog the strata in particular outcrops, there had been the hope that these could somehow be used to calculate geological time. **But as more and more accumulations of strata were cataloged in more and more places, it became clear that the sequences of rocks sometimes differed from region to region and that no rock type was ever going to become a reliable time marker throughout the world.** Even without the problem of regional differences, rocks present a difficulty as unique time markers. Quartz is quartz—a silicon ion surrounded by four oxygen ions—there's no difference at all between two-million-year-old Pleistocene quartz and Cambrian quartz created over 500 million years ago.

As he collected fossils from strata throughout England, Smith began to see that the fossils told a different story from the rocks. Particularly in the younger strata, the rocks were often so similar that he had trouble distinguishing the strata, but he never had trouble telling the fossils apart. While rock between two consistent strata might in one place be shale and in another sandstone, the fossils in that shale or sandstone were always the same. Some fossils endured through so many millions of years that they appear in many strata, but others occur only in a few strata, and a few species had their births and extinctions within one particular stratum. Fossils are thus identifying markers for particular periods in Earth's history.

Not only could Smith identify rock strata by the fossils they contained, he could also see a pattern emerging: certain fossils always appear in more ancient sediments, while others begin to be seen as the strata become more recent. ■ By following the fossils, Smith was able to put all the strata of England's earth into relative temporal sequence. ■ About the same time, Georges Cuvier made the same discovery while studying the rocks around Paris. ■ Soon it was realized that this principle of faunal (animal) succession was valid not only in England or France but virtually everywhere. ■ It was actually a principle of floral succession as well, because plants showed the same transformation through time as did fauna. Limestone may be found in the Cambrian or—300 million years later—in the Jurassic strata, but a trilobite—the ubiquitous marine arthropod that had its birth in the Cambrian—will never be found in Jurassic strata, nor a dinosaur in the Cambrian.

1. The word “rudimentary” in the passage is closest in meaning to
  - (A) thorough
  - (B) strict
  - (C) basic
  - (D) occasional
2. According to paragraph 1, which of the following statements about William Smith is NOT true?
  - (A) Smith learned surveying by reading and by apprenticing for a local surveyor.
  - (B) Smith’s family lived in a small English town and possessed little wealth.
  - (C) Smith learned about fossils from books he borrowed from his uncle.
  - (D) Smith eventually left his village to work on the excavation of an English canal.
3. Which of the following can be inferred from paragraph 2 about canal building?
  - (A) Canals were built primarily in the south of England rather than in other regions.
  - (B) Canal building decreased after the steam locomotive was invented.
  - (C) Canal building made it difficult to study rock strata which often became damaged in the process.
  - (D) Canal builders hired surveyors like Smith to examine exposed rock strata.
4. According to paragraph 2, which of the following is true of the map published by William Smith?
  - (A) It indicates the locations of England’s major canals.
  - (B) It became most valuable when the steam locomotive made rail travel possible.
  - (C) The data for the map were collected during Smith’s work on canals.
  - (D) It is no longer regarded as a geological masterpiece.
5. The word “meticulously” in the passage is closest in meaning to
  - (A) carefully
  - (B) quickly
  - (C) frequently
  - (D) obviously
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The discovery of regional differences in the sequences of rocks led geologists to believe that rock types could someday become reliable time markers.
  - (B) Careful analysis of strata revealed that rocks cannot establish geological time because the pattern of rock layers varies from place to place.
  - (C) Smith’s catalogs of rock strata indicated that the sequences of rocks are different from place to place and from region to region.
  - (D) Because people did not catalog regional differences in sequences of rocks, it was believed that rocks could never be reliable time markers.
7. Why does the author use the phrase “Quartz is quartz”?
  - (A) To describe how the differences between Pleistocene and Cambrian quartz reveal information about dating rocks
  - (B) To point out that the chemical composition of quartz makes it more difficult to date than other rocks
  - (C) To provide an example of how regional differences in rock sequences can make a particular rock difficult to date
  - (D) To explain that rocks are difficult to use for dating because their chemical compositions always remain the same over time
8. According to paragraph 4, it was difficult for Smith to distinguish rock strata because
  - (A) the rocks from different strata closely resembled each other
  - (B) he was often unable to find fossils in the younger rock strata
  - (C) their similarity to each other made it difficult for him to distinguish one rock type from another
  - (D) the type of rock between two consistent strata was always the same
9. The word “endured” in the passage is closest in meaning to
  - (A) vanished
  - (B) developed

- (C) varied
- (D) survived

**10. The word “virtually” in the passage is closest in meaning to**

- (A) possibly
- (B) absolutely
- (C) surprisingly
- (D) nearly

**11. Select the TWO answer choices that are true statements based upon the discussion of the principle of faunal succession in paragraph 5. To receive credit, you must select TWO answers.**

- (A) It was a principle that applied to fauna but not to flora.
- (B) It was discovered independently by two different geologists.
- (C) It describes how fossils are distributed in rock strata.
- (D) It explains why plants and animals undergo transformations through time.

**12. In mentioning “trilobite”, the author is making which of the following points?**

- (A) Fossils cannot be found in more than one rock stratum.
- (B) Faunal succession can help put rock layers in relative temporal sequence.
- (C) Faunal succession cannot be applied to different strata composed of the same kind of rock.
- (D) The presence of trilobite fossils makes it difficult to date a rock.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The findings of these geologists inspired others to examine the rock and fossil records in different parts of the world.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

William Smith’s contributions to geology have increased our knowledge of the Earth’s history.

**Answer choices**

- (A) Smith found success easily in his profession because he came from a family of geologists and surveyors.
- (B) Smith’s work on canals allowed him to collect fossils and study rock layers all over England.
- (C) Smith found that fossils are much more reliable indicators of geological time than rock strata are.
- (D) Smith was named “the father of English geology” for his maps rather than for his other contributions to the field.
- (E) Smith and Cuvier discovered that fossil patterns are easier to observe in ancient rock strata than in younger rock strata.
- (F) The discovery of the principle of faunal succession allowed geologists to establish the relative age of Earth’s rock layers.

### 参考答案与解析

1. 选 **C**。rudimentary 基本的，初步的，所以 basic 是正确答案。thorough 彻底和 strict 严格明显不对；偶尔的与教育不搭配，也不对。
2. 选 **C**。EXCEPT 题，排除法；A 中的 surveying 定位至第三句，正确，不选；同时第三句还说他的书是自己攒钱买的，不是问他叔叔借的，所以 C 错，选；B 中的 family 定位至第一句，little wealth 就是没钱，所以正确，不选；D 中的 English canal 定位至最后一句，正确，不选。
3. 选 **B**。以 canal building 定位至第一句，说在 steam locomotive 出现之前，canal building 达到高潮，也就是说 steam locomotive 出现之后，canal building 的热度开始下降，所以 B 是答案。那些人雇 smith 是帮他们找煤，不是检查暴露的岩层，D 错；A 和 C 都没有相关信息，不选。
4. 选 **C**。以 map 做关键词定位至最后一句，但这句话只说了 map 很好很重要，没有答案，但可以知道 D 说反了；往上看，前句说他走了很远，跟地图无关；再往前看，说他边工作边收集了他能找到的所有化石，所以 C 正确；A 和 B 都没说。
5. 选 **A**。meticulously 一丝不苟地，所以答案是 carefully。
6. 选 **B**。原文的结构是随着 blablabla，各地岩石层序不同，没有 rock type 能变成 reliable time marker。A 选项与原文说反；C 说 smith 的分类，这个原文没说；D 的因果关系纯属瞎扯。
7. 选 **D**。先读所在句子，去调插入语后，插入语之后说两百万年前的 quartz 和五亿年前的 quartz 没有任何区别，往前看，前文说即使没有 regional difference 也不行，紧接着后面就说还有时间差异；所以答案是 D。
8. 选 **A**。以 distinguish rock strata 做关键词定位至第二句，说 rock 是非常相似的，所以难以区分，所以 A 对；注意 C 不对是因为原文没说区分岩石类型；关键词所在的那句话的后半句说明 B 反了；D 没说。
9. 选 **D**。endure 忍受，耐久，所以 survive 正确。不管是 vanish 消失 develop 发展还是 vary 变化，都是发生了变化，所以都不对。
10. 选 **D**。virtually 事实上，几乎，所以答案 nearly 正确。possibly 程度太轻，absolutely 程度太重，surprisingly 表示一种惊讶，原文没有体现。
11. 选 **BC**。排除法：A 中的 flora 定位至倒数第二句，说 succession 可以用于 flora 也能用于 fauna；B 选项要找两个人，第二句和第三句刚好符合，正确；C 中的 strata 定位至第二句，正确；原文没有解释 plants 和 animals 经历了相同的 transformation，D 错。
12. 选 **B**。先读 trilobite 所在句，说灰岩会在寒武纪或者侏罗纪出现，但特殊时代的生物只会在特定时间出现。也就是生物比岩石类型可靠，B 正确；其他的都没说。
13. 选 **C**。三个过渡点，these geologists，rock and fossil records 还有 different parts of the world；these geologists 表明前面一定得有地质学家，所以 AB 排除，而且应该先说 different parts of the world，然后再用 England 和 France 做具体例子，所以 C 对 D 错。
14. 选 **BCF**。A 选项与第一段第一句相反，不选；B 选项对应第二段第三句，正确；C 选项对应第三段第三句和第四段最后一句，正确；D 选项与第三段第一句的内容相反，不选；E 选项原文没说，不选；F 选项对应第五段的第一和第二句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Infantile Amnesia**

What do you remember about your life before you were three? ■ Few people can remember anything that happened to them in their early years. ■ Adults' memories of the next few years also tend to be scanty. ■ Most people remember only a few events—usually ones that were meaningful and distinctive, such as being hospitalized or a sibling's birth. ■

How might this inability to recall early experiences be explained? The sheer passage of time does not account for it; adults have excellent recognition of pictures of people who attended high school with them 35 years earlier. Another seemingly **plausible** explanation—that infants do not form enduring memories at this point in development—also is incorrect. Children two and a half to three years old remember experiences that occurred in their first year, and eleven month olds remember some events a year later. Nor does the hypothesis that infantile amnesia reflects repression—or holding back—of sexually charged episodes explain the **phenomenon**. While such repression may occur, people cannot remember ordinary events from the infant and toddler periods either.

Three other explanations seem more promising. One involves physiological changes relevant to memory. Maturation of the frontal lobes of the brain continues throughout early childhood, and this part of the brain may be critical for remembering particular episodes in ways that can be retrieved later. Demonstrations of infants' and toddlers' long-term memory have involved their repeating motor activities that they had seen or done earlier, such as reaching in the dark for objects, putting a bottle in a doll's mouth, or pulling apart two pieces of a toy. The brain's level of physiological maturation may support these types of memories, but not ones requiring explicit verbal descriptions.

A second explanation involves the influence of the social world on children's language use. Hearing and telling stories about events may help children store information in ways that will endure into later childhood and adulthood. Through hearing stories with a clear beginning, middle, and ending children may learn to extract the gist of events in ways that they will be able to describe many years later. Consistent with this view, parents and children increasingly engage in discussions of past events when children are about three years old. However, hearing such stories is not sufficient for younger children to form enduring memories. Telling such stories to two year olds does not seem to produce long-lasting verbalizable memories.

A third likely explanation for infantile amnesia involves incompatibilities between the ways in which infants encode information and the ways in which older children and adults retrieve it. Whether people can remember an event depends **critically** on the fit between the way in which they earlier encoded the information and the way in which they later attempt to retrieve it. The better able the person is to reconstruct the **perspective** from which the material was encoded, the more likely that recall will be successful.

**This view** is supported by a variety of factors that can create mismatches between very young children's encoding and older children's and adults' retrieval efforts. The world looks very different to a person whose head is only two or three feet above the ground than to one whose head is five or six feet above it. Older children and adults often try to retrieve the names of things they saw, but infants would not have encoded the information verbally. General knowledge of categories of events such as a birthday party or a visit to the doctor's office helps older individuals encode their experiences, but again, infants and toddlers are unlikely to encode many experiences within such knowledge structures.

These three explanations of infantile amnesia are not mutually exclusive; indeed, they support each other.

**Physiological immaturity may be part of why infants and toddlers do not form extremely enduring memories, even when they hear stories that promote such remembering in preschoolers.** Hearing the stories may lead preschoolers to encode aspects of events that allow them to form memories they can access as adults. Conversely, improved encoding of what they hear may help them better understand and remember stories and thus make the stories more useful for remembering future events. Thus, all three explanations—physiological maturation, hearing and producing stories about past events, and improved encoding of key aspects of events—seem likely to be involved in overcoming infantile amnesia.

1. **What purpose does paragraph 2 serve in the larger discussion of children's inability to recall early experiences?**
  - (A) To argue that theories that are not substantiated by evidence should generally be considered unreliable
  - (B) To argue that the hypotheses mentioned in paragraph 2 have been more thoroughly researched than have the theories mentioned later in the passage
  - (C) To explain why some theories about infantile amnesia are wrong before presenting ones more likely to be true
  - (D) To explain why infantile amnesia is of great interest to researchers
2. **The word "plausible" in the passage is closest in meaning to**
  - (A) flexible
  - (B) believable
  - (C) debatable
  - (D) predictable
3. **The word "phenomenon" in the passage is closest in meaning to**
  - (A) exception
  - (B) repetition
  - (C) occurrence
  - (D) idea
4. **All of the following theories about the inability to recall early experiences are rejected in paragraph 2 EXCEPT**
  - (A) The ability to recall an event decreases as the time after the event increases.
  - (B) Young children are not capable of forming memories that last for more than a short time.
  - (C) People may hold back sexually meaningful memories.
  - (D) Most events in childhood are too ordinary to be worth remembering.
5. **What does paragraph 3 suggest about long-term memory in children?**
  - (A) Maturation of the frontal lobes of the brain is important for the long-term memory of motor activities but not verbal descriptions.
  - (B) Young children may form long-term memories of actions they see earlier than of things they hear or are told.
  - (C) Young children have better long-term recall of short verbal exchanges than of long ones.
  - (D) Children's long-term recall of motor activities increases when such activities are accompanied by explicit verbal descriptions.
6. **According to paragraph 4, what role may storytelling play in forming childhood memories?**
  - (A) It may encourage the physiological maturing of the brain.
  - (B) It may help preschool children tell the difference between ordinary and unusual memories.
  - (C) It may help preschool children retrieve memories quickly.
  - (D) It may provide an ordered structure that facilitates memory retrieval.
7. **The word "critically" in the passage is closest in meaning to**
  - (A) fundamentally
  - (B) partially
  - (C) consistently
  - (D) subsequently
8. **The word "perspective" in the passage is closest in meaning to**
  - (A) system
  - (B) theory
  - (C) source
  - (D) viewpoint
9. **The phrase "This view" in the passage refers to the belief that**
  - (A) the ability to retrieve a memory partly depends on the similarity between the encoding and retrieving process
  - (B) the process of encoding information is less complex for adults than it is for young adults and infants

- (C) infants and older children are equally dependent on discussion of past events for the retrieval of information
- (D) infants encode information in the same way older children and adults do

**10. According to paragraphs 5 and 6, one disadvantage very young children face in processing information is that they cannot**

- (A) process a lot of information at one time
- (B) organize experiences according to type
- (C) block out interruptions
- (D) interpret the tone of adult language

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Incomplete physiological development may partly explain why hearing stories does not improve long-term memory in infants and toddlers.
- (B) One reason why preschoolers fail to comprehend the stories they hear is that they are physiologically immature.
- (C) Given the chance to hear stories, infants and toddlers may form enduring memories despite physiological immaturity.
- (D) Physiologically mature children seem to have no difficulty remembering stories they heard as preschoolers.

**12. How does paragraph 7 relate to the earlier discussion of infantile amnesia?**

- (A) It introduces a new theory about the causes of infantile amnesia.
- (B) It argues that particular theories discussed earlier in the passage require further research.
- (C) It explains how particular theories discussed earlier in the passage may work in combination.
- (D) It evaluates which of the theories discussed earlier is most likely to be true.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Other important occasions are school graduations and weddings.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

There are several possible explanations why people cannot easily remember their early childhoods.

**Answer choices**

- (A) Preschoolers typically do not recall events from their first year.
- (B) Frontal lobe function of the brain may need to develop before memory retrieval can occur.
- (C) Children recall physical activities more easily if they are verbalized.
- (D) The opportunity to hear chronologically narrated stories may help three-year-old children produce long-lasting memories.
- (E) The content of a memory determines the way in which it is encoded.
- (F) The contrasting ways in which young children and adults process information may determine their relative success in remembering.

### 参考答案与解析

1. 选 **C**。以 inability to recall early experience 定位至第一句，但这句话是个问题，我们应该关注的是答案，也就是第二句，第二句说时间不是遗忘的原因，接着又说另一个可能的解释，也就是先给一个不对的，再说一个可能的，所以 C 是答案。
2. 选 **B**。plausible 合理的，动听的，所以 believable 可信的是正确答案。A 可变的、D 可预测的都是中性；C 的 debatable 稍有贬义，更不靠谱。
3. 选 **C**。phenomenon 现象，所以 occurrence 正确。A 例外、B 重复、D 主意都不对。
4. 选 **D**。EXCEPT 题，排除法。A 中的 time 定位至第二句的前半句，这个原因被排除了，所以 A 对，不选；B 中的 memories 定位至第三句，插入语的内容正是这个选项，原文也认为不合理，所以 B 对，不选；C 的 sexually meaningful memories 定位至倒数第二句，也被排除了，所以 C 对，不选，错的是 D，选。
5. 选 **B**。以 long-term memory 定位至倒数第二句，说婴儿会重复他们看到的动作，接着就说大脑成熟导致他们能形成关于这些的记忆，但那些需要清楚解释的不行，也就是这个阶段还不能记住听到的东西，所以 B 说看到的比听到的早，正确。A 错，没说对 verbal description 不重要；CD 没说。
6. 选 **D**。以 storytelling 做关键词定位至第二、三两句。故事里的信息会像孩子们长大的时候听到的方式呈现给他们，所以 D 的 ordered structure 是正确的。ABC 都没说。
7. 选 **A**。critically 关键的，重要的，所以 A 的 fundamentally 基本的正确。B 部分程度不够，C 总是程度过深，D 接下来完全不靠谱。
8. 选 **D**。perspective 观点，视角，前景，所以 D 的 viewpoint 正确。source 错、system 完全不靠谱、theory 表示理论，D 观点更好些，所以 D 正确。
9. 选 **A**。一开始就是一个 This view，说明一定和上段有关，而 This view 所代表的正是上一段的观点，上段说婴儿会遗忘是因为成人和婴儿解码与获取信息的方式不同，所以答案很显然是 A；B 和 C 都没提到，D 说反了，应该是不同。
10. 选 **B**。第五段和第六段都在说成人和大孩子与婴儿解析信息的方式不同，第六段给出了具体例子，最后一句说成人和大孩子关于类别的常识可以帮他们解析信息，但小孩子不能，也就是小孩子不会分类，所以 B 是答案，其他都没说。
11. 选 **A**。这个句子比较简单，说 immaturity 是 do not form enduring memories 的原因，即使 blabla，A 正确。B 错在改变了原文结构，原文的结果是 do not form enduring memories，B 改成了 comprehend stories；C 与原文 even 之后的部分相反；D 没说，注意不能推断。
12. 选 **C**。问到整个段，看开头，说之前的三个理论不是互相排斥的，而是相互支持的，很显然 C 的 work in combination 正确，而且本段最后又说 all three explanations seem likely to be involved in overcoming，进一步证明 C 正确。
13. 选 **D**。只有一个过渡点，但已经够了，other important occasions 说明之前一定要有一些 important occasion，D 之前的破折号对 events 进行了解释，meaningful and distinctive，而且给了一些例子，就是 important 的同义替换，所以之前有一些重要的了，other 很自然应该放在其后。
14. 选 **BDF**。A 选项原文没说，不选；B 选项对应原文第三段第二句，正确；C 选项原文没说，不选；D 选项对应原文第四段第二句和倒数第二句，正确；E 选项原文没说，不选；F 选项对应原文第五段第一句，正确。

### 笔记区

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**The Geologic History of the Mediterranean**

In 1970 geologists Kenneth J. Hsu and William B.F. Ryan were collecting research data while aboard the oceanographic research vessel Glomar Challenger. An objective of this particular cruise was to investigate the floor of the Mediterranean and to resolve questions about its geologic history. One question was related to evidence that the invertebrate fauna (animals without spines) of the Mediterranean had changed abruptly about 6 million years ago. Most of the older organisms were nearly wiped out, although a few hardy species survived. A few managed to migrate into the Atlantic. Somewhat later, the migrants returned, bringing new species with them. Why did the near extinction and migrations occur?

■ Another task for the Glomar Challenger's scientists was to try to determine the origin of the domelike masses buried deep beneath the Mediterranean seafloor. ■ These structures had been detected years earlier by echo-sounding instruments, but they had never been penetrated in the course of drilling. ■ Were they salt domes such as are common along the United States Gulf Coast, and if so, why should there have been so much solid crystalline salt beneath the floor of the Mediterranean? ■

With question such as these clearly before them, the scientists aboard the Glomar Challenger processed to the Mediterranean to search for the answers. On August 23, 1970, they recovered a sample. The sample consisted of pebbles of hardened sediment that had once been soft, deep-sea mud, as well as granules of gypsum and fragments of volcanic rock. Not a single pebble was found that might have indicated that the pebbles came from the nearby continent. In the days following, samples of solid gypsum were repeatedly brought on deck as drilling operations penetrated the seafloor. Furthermore, the gypsum was found to possess peculiarities of composition and structure that suggested it had formed on desert flats. Sediment above and below the gypsum layer contained tiny marine fossils, indicating open-ocean conditions. As they drilled into the central and deepest part of the Mediterranean basin, the scientists took solid, shiny, crystalline salt from the core barrel. Interbedded with the salt were thin layers of what appeared to be windblown silt.

The time had come to formulate a hypothesis. The investigators theorized that about 20 million years ago, the Mediterranean was a broad seaway linked to the Atlantic by two narrow straits. Crustal movements closed the straits, and the landlocked Mediterranean began to evaporate. Increasing salinity caused by the evaporation resulted in the extermination of scores of invertebrate species. Only a few organisms especially tolerant of very salty conditions remained. As evaporation continued, the remaining brine (salt water) became so dense that the calcium sulfate of the hard layer was precipitated. In the central deeper part of the basin, the last of the brine evaporated to precipitate more soluble sodium chloride (salt). Later, under the weight of overlying sediments, this salt flowed plastically upward to form salt domes. Before this happened, however, the Mediterranean was a vast desert 3,000 meters deep. Then, about 5.5 million years ago came the deluge. **As a result of crustal adjustments and faulting, the Strait of Gibraltar, where the Mediterranean now connects to the Atlantic, opened, and water cascaded spectacularly back into the Mediterranean.** Turbulent waters tore into the hardened salt flats, broke them up, and ground them into the pebbles observed in the first sample taken by the Challenger. As the basin was refilled, normal marine organisms returned. Soon layer of oceanic ooze began to accumulate above the old hard layer.

The salt and *gypsum*\*, the faunal changes, and the unusual gravel provided abundant evidence that the Mediterranean was once a desert.

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**Gypsum:** a mineral made of calcium sulfate and water

1. The word “objective” in the passage is closest in meaning to
  - (A) achievement
  - (B) requirement
  - (C) purpose
  - (D) feature
2. Which of the following is NOT mentioned in paragraph 1 as a change that occurred in the fauna of the Mediterranean?
  - (A) Most invertebrate species disappeared during a wave of extinctions.
  - (B) A few hardy species wiped out many of the Mediterranean’s invertebrates.
  - (C) Some invertebrates migrated to Atlantic Ocean.
  - (D) New species of fauna populated the Mediterranean when the old migrants returned.
3. What does the author imply by saying “Not a single pebble was found that might have indicated that the pebbles came from the nearby continent.”?
  - (A) The most obvious explanation for the origin of the pebbles was not supported by the evidence.
  - (B) The geologists did not find as many pebbles as they expected.
  - (C) The geologists were looking for a particular kind of pebble.
  - (D) The different pebbles could not have come from only one source.
4. Which of the following can be inferred from paragraph 3 about the solid gypsum layer?
  - (A) It did not contain any marine fossil.
  - (B) It had formed in open-ocean conditions.
  - (C) It had once been soft, deep-sea mud.
  - (D) It contained sediment from nearby deserts.
5. Select the TWO answer choice from paragraph 3 that identify materials discovered in the deepest part of the Mediterranean basin. To receive credit you must select TWO answers.
  - (A) Volcanic rock fragments
  - (B) Thin silt layers
  - (C) Soft, deep-sea mud
  - (D) Crystalline salt
6. What is the main purpose of paragraph 3?
  - (A) To describe the physical evidence collected by Hsu and Ryan
  - (B) To explain why some of the questions posed earlier in the passage could not be answered by the findings of the Glomar Challenger
  - (C) To evaluate techniques used by Hsu and Ryan to explore the sea floor
  - (D) To describe the most difficult problems faced by the Glomar Challenger expedition
7. According to paragraph 4, which of the following was responsible for the evaporation of the Mediterranean’s waters?
  - (A) The movements of Earth’s crust
  - (B) The accumulation of sediment layers
  - (C) Changes in the water level of the Atlantic Ocean
  - (D) Changes in Earth’s temperature
8. The phrase “scores of” in the passage is closest in meaning to
  - (A) members
  - (B) large numbers
  - (C) populations
  - (D) different types
9. According to paragraph 4, what caused most invertebrate species in the Mediterranean to become extinct?
  - (A) The evaporation of chemicals necessary for their survival
  - (B) Crustal movements that connected the Mediterranean to the saltier Atlantic
  - (C) The migration of new species through the narrow straits
  - (D) Their inability to tolerate the increasing salt content of the Mediterranean

**10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) The strait of Gibraltar reopened when the Mediterranean and the Atlantic became connected and the cascades of water from one sea to the other caused crustal adjustments and faulting.
- (B) The Mediterranean was dramatically refilled by water from the Atlantic when crustal adjustments and faulting opened the Strait of Gibraltar, the place where the two seas are joined.
- (C) The cascades of water from the Atlantic to the Mediterranean were not as spectacular as the crustal adjustments and faulting that occurred when the Strait of Gibraltar was connected to those seas.
- (D) As a result of crustal adjustments and faulting and the creation of the Strait of Gibraltar, the Atlantic and Mediterranean were connected and became a single sea with spectacular cascades of water between them.

**11. The word “Turbulent” in the passage is closest in meaning to**

- (A) Fresh
- (B) Deep
- (C) Violent
- (D) Temperate

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Thus, scientists had information about the shape of the domes but not about their chemical composition and origin.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

An expedition to the Mediterranean answered some long-standing questions about the ocean’s history.

**Answer choices**

- (A) The Glomar Challenger expedition investigated changes in invertebrate fauna and some unusual geologic features.
- (B) Researchers collected fossils to determine which new species migrated from the Atlantic with older species.
- (C) Scientists aboard the Glomar Challenger were the first to discover the existence of domelike masses underneath the seafloor.
- (D) Samples recovered from the expedition revealed important differences in chemical composition and fossil distribution among the sediment layers.
- (E) Evidence collected by the Glomar Challenger supports geologists’ beliefs that the Mediterranean had evaporated and become a desert, before it refilled with water.
- (F) Mediterranean salt domes formed after crustal movements opened the straits between the Mediterranean and the Atlantic, and the Mediterranean refilled with water.

### 参考答案与解析

1. 选 **C**。objective 目标，目的，purpose 正确。
2. 选 **B**。EXCEPT 题，排除法。A 中的 invertebrate 做关键词定位至第三句，但这句只说 change，下一句才对应 A 答案，所以 A 对，不选；注意原文说大部分 wiped out，一部分 hardy 的剩下了，而 B 说 hardy 的把大部分轰出去了，错，所以选 B；C 的 Atlantic 对应倒数第二句，对，不选；D 的 old migrants 对应最后一句，对，不选。
3. 选 **A**。先把修辞点所在的句子读清楚，说没有 pebble 能证明是形成在 nearby continent 的，注意这道题如果往前看的话是找不到答案的，即使是看完中心句也没用，所以索性往后看。后面 furthermore 那句说这些 pebble 是形成在沙漠的，也就是说之前认为的很明显的证据是不对的，A 对；剩下的选项都没说。
4. 选 **A**。以 gypsum layer 做关键词定位至倒数第二句，说 gypsum layer 之上和之下的 sediment 都包含 marine fossils，之间的 gypsum layer 应该是不包含的，否则就没法分层了。原文倒数第三句明确说 gypsum 形成在 desert flats，所以 B 的 open-ocean 就不对；虽然说了 desert，但 nearby 这个信息是没法推得的，所以 D 不对；C 没说。
5. 选 **BD**。以 Mediterranean basin 做关键词定位至最后一句，说科学家从盆地底拿到了 salt 和 windblown silt，所以 B 和 D 正确。
6. 选 **A**。看第一句，说为了解决这些问题，科学家们开船到地中海，接着就花大量笔墨说他们采到各种各样的 sample，所以答案是 A。原文没说问题不能解决的原因，B 错；技术的事儿只是带过，并没有详细描述，C 错；D 说航行中遇到的问题完全没提。
7. 选 **A**。以 evaporation 做关键词定位至第三句，但第三句已经开始说 evaporation 引起的结果了，跟问题无关，而第二句说 crustal movement 关闭了海峡，然后海水开始蒸发，所以答案是 A。
8. 选 **B**。scores of 指的是大量，跟 score 的原意无关，所以 B 正确。
9. 选 **D**。以 invertebrate species 做关键词定位至第四句，是 increasing salinity 增加的盐度导致的。
10. 选 **B**。原句的结构是由于 crustal adjustment 和 faulting，导致海峡 open 和水流。A 因果弄反，错；C 的 as spectacular as 将两者进行比较，而这是原文没有的，所以错；D 把原文中属于结果的海峡打开搬到了原因部分，改变了原文结构，错。
11. 选 **C**。turbulent 动荡的，狂暴的，骚动的，所以 violent 正确。原句说什么样的水撕开了硬化的盐田，将它们弄碎并且形成小卵石，说明水的冲击力很大，无论是 A 新鲜水 B 深水还是 D 缓流的水都达不到这种效果。
12. 选 **C**。四个过渡点，thus 说明正确插入点之前的句子和待插入句子之间存在因果关系：shape、dome 还有 chemical composition and origin。dome 和 chemical composition and origin 与原文的 salt domes 和 crystalline salt 重合，断定 C 或者 D 是正确答案；C 点之前说这些 dome 已经用回声测过了，所以应该知道形状，thus 表明的因果关系成立，所以 C 对 D 错。
13. 选 **ADE**。A 选项对应第一段第三句和第二段的第一句，正确；B 选项原文没说，不选；C 选项与第二段第一句相反，这句话说科学家的目的是为了确定那些 domelike masse 的来源，也就是说以前已经发现了，所以他们不是第一个，错；D 选项对应整个第三段，正确；E 选项对应整个第四段，说地中海曾经干涸，后来又被填满，正确；F 选项与第四段倒数第六句说反，不选。

### 笔记区

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**Ancient Rome and Greece**

There is a quality of cohesiveness about the Roman world that applied neither to Greece nor perhaps to any other civilization, ancient or modern. **Like the stone of Roman wall, which were held together both by the regularity of the design and by that peculiarly powerful Roman cement, the various parts of the Roman realm were bonded into a massive, monolithic entity by physical, organizational, and psychological controls.** The physical bonds included the network of military garrisons, which were stationed in every province, and the network of stone-built roads that linked the provinces with Rome. The organizational bonds were based on the common principles of law and administration and on the universal army of officials who enforced common standards of conduct. The psychological controls were built on fear and punishment—on the absolute certainty that anyone or anything that threatened the authority of Rome would be utterly destroyed.

The source of Roman **obsession with** unity and cohesion may well have lain in the pattern of Rome's early development. Whereas Greece had grown from scores of scattered cities, Rome grew from one single organism. While the Greek world had expanded along the Mediterranean seas lanes, the Roman world was assembled by territorial conquest. Of course, the contrast is not quite so stark: in **Alexander the Great** the Greeks had found the greatest territorial conqueror of all time; and the Romans, once they moved outside Italy, did not fail to learn the lessons of sea power. Yet the essential difference is undeniable. The key to the Greek world lay in its high-powered ships; the key to Roman power lay in its marching legions. The Greeks were wedded to the sea; the Romans, to the land. The Greek was a sailor at heart; the Roman, a landsman.

Certainly, in trying to explain the Roman phenomenon, one would have to place great emphasis on this almost instinct for the territorial imperative. Roman priorities lay in the organization, exploitation, and defense of their territory. In all probability it was the fertile plain of Latium, where the Latins who founded Rome originated, that created the habits and skills of landed settlement, landed property, landed economy, landed administration, and a land-based society. From this arose the Roman genius for military organization and orderly government. In turn, a deep attachment to the land, and to the stability which rural life engenders, **fostered** the Roman virtues: gravitas, a sense of responsibility, pietas, a sense of devotion to family and country, and justitia, a sense of the natural order.

Modern attitudes to Roman civilization range from the infinitely impressed to the thoroughly disgusted. ■ As always, there are the power worshippers, especially among historians, who are predisposed to admire whatever is strong, who feel more attracted to the might of Rome than to the subtlety of Greece. ■ At the same time, there is a solid body of opinion that dislikes Rome. ■ For many, Rome is at best the imitator and the continuator of Greece on a larger scale. ■ Greek civilization had quality; Rome, mere quantity. Greece was original; Rome, derivative. Greece had style; Rome had money. Greece was the inventor; Rome, the research and development division. Such indeed was the opinion of some of the more intellectual Romans. "Had the Greeks held novelty in such disdain as we," asked Horace in his epistle, "what work of ancient date would now exist?"

Rome's debt to Greece was enormous. The Romans adopted Greek religion and moral philosophy. In literature, Greek writers were consciously used as models by their Latin successors. It was absolutely accepted that an educated Roman should be fluent in Greek. In speculative philosophy and the sciences, the Romans made virtually no advance on early achievements.

Yet it would be wrong to suggest that Rome was somehow a junior partner in Greco-Roman civilization. The Roman genius was projected into new **spheres**—especially into those of law, military organization, administration, and engineering. Moreover, the tensions that arose within the Roman state produced literary and artistic sensibilities of the highest order. It was no accident that many leading Roman soldiers and statesmen were writers of high caliber.

1. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) The regularity and power of stone walls inspired Romans attempting to unify the parts of their realm.
  - (B) Although the Romans used different types of designs when building their walls, they used regular controls to maintain their realm.
  - (C) Several types of control united the Roman realm, just as design and cement held Roman walls together.
  - (D) Romans built walls to unite the various parts of their realm into a single entity, which was controlled by powerful laws.
2. **According to paragraph 1, all of the following are controls that held together the Roman world EXCEPT**
  - (A) administrative and legal systems
  - (B) the presence of the military
  - (C) a common language
  - (D) transportation networks
3. **The phrase “obsession with” in the passage is closest in meaning to**
  - (A) thinking about
  - (B) fixation on
  - (C) interest in
  - (D) attitude toward
4. **According to paragraph 2, which of the following was NOT characteristic of Rome’s early development?**
  - (A) Expansion by sea invasion
  - (B) Territorial expansion
  - (C) Expansion from one original settlement
  - (D) Expansion through invading armies
5. **Why does the author mention “Alexander the Great” in the passage?**
  - (A) To acknowledge that Greek civilization also expanded by land conquest
  - (B) To compare Greek leaders to Roman leaders
  - (C) To give an example of Greek leader whom Romans studied
  - (D) To indicate the superior organization of the Greek military
6. **The word “fostered” in the passage is closest in meaning to**
  - (A) accepted
  - (B) combined
  - (C) introduced
  - (D) encouraged
7. **Paragraph 3 suggests which of the following about the people of Latium?**
  - (A) Their economy was based on trade relations with other settlements.
  - (B) They held different values than the people of Rome.
  - (C) Agriculture played a significant role in the society.
  - (D) They possessed unusual knowledge of animal instincts.
8. **Paragraph 4 indicates that some historians admire Roman civilization because of**
  - (A) the diversity of cultures within Roman society
  - (B) its strength
  - (C) its innovative nature
  - (D) the large body of literature that it developed
9. **In paragraph 4, the author develops a description of Roman civilization by**
  - (A) comparing the opinions of Roman intellectuals to Greek intellectuals
  - (B) identifying which characteristics of Roman civilization were copied from Greece
  - (C) explaining how the differences between Roman and Greece developed as time passed
  - (D) contrasting characteristics of Roman civilization with characteristics of Greek civilization

**10. According to paragraph 4, intellectual Romans such as Horace held which of the following opinions about their civilization?**

- (A) Ancient works of Greece held little value in the Roman world.
- (B) The Greek civilization had been surpassed by the Romans.
- (C) Roman civilization produced little that was original or memorable.
- (D) Romans valued certain types of innovations that had been ignored by ancient Greeks.

**11. The word “spheres” in the passage is closest in meaning to**

- (A) abilities
- (B) areas
- (C) combinations
- (D) models

**12. Which of the following statements about leading Roman soldiers and statesmen is supported by paragraphs 5 and 6?**

- (A) They could read and write the Greek language.
- (B) They frequently wrote poetry and plays.
- (C) They focused their writing on military matters.
- (D) They wrote according to the philosophical laws of the Greeks.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

They esteem symbols of Roman power, such as the massive Colosseum.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The Roman world drew its strength from several important sources.

**Answer choices**

- (A) Numerous controls imposed by Roman rulers held its territory together.
- (B) The Roman military was organized differently from older military organizations.
- (C) Romans valued sea power as did the Latins, the original inhabitants of Rome.
- (D) Roman values were rooted in a strong attachment to the land and the stability of rural life.
- (E) Rome combined aspects of ancient Greek civilization with its own contributions in new areas.
- (F) Educated Romans modeled their own literature and philosophy on the ancient Greeks.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **C**。原句的结构是就像石头一样，罗马被一大堆东西连起来。A 中的 inspire 纯属瞎编乱造；B 中的让步也是原句没有的，错；D 前半句正确，但从句说 powerful laws 缩小了 control，不对。
2. 选 **C**。EXCEPT 题，排除法。第一题说了好多 control，接下来的第三、四两句就分别说了 physical 和 psychological control，A 中的 administrative 定位至第四句，正确，不选；B 和 D 在第三句，正确，不选；C 没说，选。
3. 选 **B**。obsession with 着迷于，所以 fixation on 着迷于正确，原句说罗马人对于统一的什么来自于他们早期的发展，然后解释说希腊人是散落的岛上发展起来的，而罗马人从一开始就是一个整体，所以罗马人对统一应该是正向态度，而 attitude toward 和 thinking about 都没有态度，不对；注意仅仅是 interest in 是不够的，应该是着迷。
4. 选 **A**。EXCEPT 题，排除法。A 选项与原文第三句说反，原文说是陆地 A 说是海洋，所以错，选；同时也说明 B 正确，不选；C 中的 one original settlement 定位至第二句，正确，不选；D 的 invading armies 定位至倒数第三句，注意 legion 就是 armies，所以 D 对，不选。
5. 选 **A**。原文说在亚历山大大帝时代，希腊也建立了很强大的陆军，前面一直在说希腊是海洋型军队，但这句的前半句说对比也不是绝对鲜明的，紧接着就给了这个例子，也就是说希腊也有陆上部队，所以答案是 A。
6. 选 **D**。foster 培养，促进，所以 D 的 encourage 正确。原句说对土地和稳定的依靠怎么样了罗马人的性格，责任感，为国家和家庭贡献，还有天然的秩序性。前者对后者应该是正向作用的，而 accept/combine/introduce 都没有倾向性，所以 encourage 正确。
7. 选 **C**。以 Lantium 做关键词定位至第三句，说这个地方的人有一系列与土地相关的性格，既然与土地相关，C 就正确；A 说反了，原文说经济以土地为主，贸易是不靠土地的；B 说反了，那个地方的人就是建立罗马帝国的人；D 没说。
8. 选 **B**。以 historians 做关键词定位至第二句，说总有那些强权崇拜者，而且解释说他们崇拜强者，所以这些人崇拜罗马的原因也是这个。
9. 选 **D**。以 Roman civilization 做关键词定位至第一句，说有人喜欢罗马有人不喜欢。从第二句开始，作者每说一个罗马文化的特点就与希腊文化中对应的点进行比较。A/C/D 都有提到希腊和罗马的比较，B 没有，所以错；但原文不仅是比较 intellectuals，A 错；C 的时间流逝没说，错。
10. 选 **C**。以人名做关键词定位至最后一句，这句话一开始就有个 such，所以上文才是 Horace 的观点，前面不停说希腊是原创者，罗马只是跟着学，所以答案是 C，罗马没什么有价值的东西，A/B 都说反了；D 不同类型没说。
11. 选 **B**。sphere 球体，所以 B 的 area 领域正确，原句 sphere 后的破折号对这个词给出了解释，law, military organization, administration and engineering 都是学科或者领域；A 能力 C 联合 D 模型都不对。
12. 选 **A**。以 Roman soldiers and statesman 做关键词定位至第六段最后一句，说这些人是很有才的作家，然后似乎没答案，但问的是根据第五和第六两段啊，上一段还没看，上段倒数第二句说受过良好教育的罗马人都精通希腊语，所以上面说的那些有才的作家肯定也精通了，A 正确；没找到的话用排除法，其他三项都没说。
13. 选 **B**。两个过渡点，代词 they 和名词 power，根据 power 只有 A 和 B 有可能对，而且 they 之前必须有那些崇拜 power 的人，放 B 的话有 historians，放 A 的话没有，A 排除，正确答案 B。
14. 选 **ADE**。A 选项对应第一段前两句，正确；B 选项原文没说，不选；C 选项与原文第二段和第三段的第一句的内容相反，不选；D 选项对应原文第三段首句，正确；E 选项对应原文第六段第二句，正确；F 选项原文没说，不选。

## 自我评价

用时：      分      秒

难度：易 / 中 / 难

错误：      个

**Agriculture, Iron, and the Bantu Peoples**

There is evidence of agriculture in Africa prior to 3000 B.C. It may have developed independently, but many scholars believe that the spread of agriculture and iron throughout Africa linked it to the major centers of the Near East and Mediterranean world. The drying up of what is now the Sahara desert had pushed many peoples to the south into sub-Saharan Africa. These peoples settled at first in scattered hunting-and-gathering bands, although in some places near lakes and rivers, people who fished, with a more secure food supply, lived in larger population concentrations. Agriculture seems to have reached these people from the Near East, since the first domesticated crops were millets and sorghums whose origins are not African but west Asian. Once the idea of planting **diffused**, Africans began to develop their own crops, such as certain varieties of rice, and they demonstrated a continued receptiveness to new imports. The proposed areas of the domestication of African crops lie in a band that extends from Ethiopia across southern Sudan to West Africa. Subsequently, other crops, such as bananas, were introduced from Southeast Asia.

Livestock also came from outside Africa. Cattle were introduced from Asia, as probably were domestic sheep and goats. Horses were apparently introduced by the Hyksos invaders of Egypt (1780–1560 B.C.) and then spread across the Sudan to West Africa. Rock paintings in the Sahara indicate that horses and chariots were used to traverse the desert and that by 300–200 B.C., there were trade routes across the Sahara. Horses were adopted by peoples of the West African savannah, and later their powerful cavalry forces allowed them to carve out large empires. Finally, the camel was introduced around the first century A.D. This was an important innovation, because the camel's abilities to thrive in harsh desert conditions and to carry large loads cheaply made it an effective and efficient means of transportation. The camel transformed the desert from a barrier into a still difficult, but more accessible, route of trade and communication.

Iron came from West Asia, although its routes of diffusion were somewhat different than those of agriculture. Most of Africa presents a curious case in which societies moved directly from a technology of stone to iron without passing through the intermediate stage of copper or bronze metallurgy, although some early copper-working sites have been found in West Africa. Knowledge of iron making penetrated into the forest and savannahs of West Africa at roughly the same time that iron making was reaching Europe. Evidence of iron making has been found in Nigeria, Ghana, and Mali.

This technological shift caused **profound** changes in the complexity of African societies. Iron represented power. In West Africa the blacksmith who made tools and weapons had an important place in society, often with special religious powers and functions. Iron hoes, which made the land more productive, and iron weapons, which made the warrior more powerful, had symbolic meaning in a number of West African societies. Those who knew the secrets of making iron gained **ritual** and sometimes political power.

**Unlike in the Americas, where metallurgy was a very late and limited development, Africans had iron from a relatively early date, developing ingenious furnaces to produce the high heat needed for production and to control the amount of air that reached the carbon and iron ore necessary for making iron.** Much of Africa moved right into the Iron Age, taking the basic technology and adapting it to local conditions and resources.

The diffusion of agriculture and later of iron was accompanied by a great movement of people who may have carried these innovations. These people probably originated in eastern Nigeria. ■ Their migration may have been set in motion by an increase in population caused by a movement of peoples **fleeing** the desiccation, or drying up, of the Sahara. ■ They spoke a language, proto-Bantu (*Bantu* means *the people*), which is the parent tongue of a language of a large number of Bantu languages still spoken throughout sub-Saharan Africa. Why and how these people spread out into central and southern Africa remains a mystery, but archaeologists believe that their iron weapons allowed them to conquer their hunting-gathering opponents, who still used stone implements. ■ Still, the process is uncertain, and peaceful migration—or simply rapid demographic growth—may have also caused the **Bantu explosion**. ■

1. The word **"diffused"** in the passage is closest in meaning to
  - (A) emerged
  - (B) was understood
  - (C) spread
  - (D) developed
2. According to paragraph 1, why do researchers doubt that agriculture developed independently in Africa?
  - (A) African lakes and rivers already provided enough food for people to survive without agriculture.
  - (B) The earliest examples of cultivated plants discovered in Africa are native to Asia.
  - (C) Africa's native plants are very difficult to domesticate.
  - (D) African communities were not large enough to support agriculture.
3. In paragraph 1, what does the author imply about changes in the African environment during this time period?
  - (A) The climate was becoming milder, allowing for a greater variety of crops to be grown.
  - (B) Although periods of drying forced people south, they returned once their food supply was secure.
  - (C) Population growth along rivers and lakes was dramatically decreasing the availability of fish.
  - (D) A region that had once supported many people was becoming a desert where few could survive.
4. According to paragraph 2, camels were important because they
  - (A) were the first domesticated animal to be introduced to Africa
  - (B) allowed the people of the West African savannahs to carve out large empires
  - (C) helped African peoples defend themselves against Egyptian invaders
  - (D) made it cheaper and easier to cross the Sahara
5. According to paragraph 2, which of the following were subjects of rock paintings in the Sahara?
  - (A) Horses and chariots
  - (B) Sheep and goats
  - (C) Hyksos invaders from Egypt
  - (D) Camels and cattle
6. What function does paragraph 3 serve in the organization of the passage as a whole?
  - (A) It contrasts the development of iron technology in West Asia and West Africa.
  - (B) It discusses a non-agricultural contribution to Africa from Asia.
  - (C) It introduces evidence that a knowledge of copper working reached Africa and Europe at the same time.
  - (D) It compares the rates at which iron technology developed in different parts of Africa.
7. The word **"profound"** in the passage is closest in meaning to
  - (A) fascinating
  - (B) far-reaching
  - (C) necessary
  - (D) temporary
8. The word **"ritual"** in the passage is closest in meaning to
  - (A) military
  - (B) physical
  - (C) ceremonial
  - (D) permanent
9. According to paragraph 4, all of the following were social effects of the new metal technology in Africa EXCEPT
  - (A) Access to metal tools and weapons created greater social equality.
  - (B) Metal weapons increased the power of warriors.
  - (C) Iron tools helped increase the food supply.
  - (D) Technical knowledge gave religious power to its holders.
10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- (A) While American iron makers developed the latest furnaces, African iron makers continued using earlier techniques.
- (B) Africans produced iron much earlier than Americans, inventing technologically sophisticated heating systems.
- (C) Iron making developed earlier in Africa than in the Americas because of the ready availability of carbon and iron ore.
- (D) Both Africa and the Americas developed the capacity for making iron early, but African metallurgy developed at a slower rate.

**11. The word “fleeing” in the passage is closest in meaning to**

- (A) afraid of
- (B) displaced by
- (C) running away from
- (D) responding to

**12. Paragraph 6 mentions all of the following as possible causes of the “Bantu explosion” EXCEPT**

- (A) superior weapons
- (B) better hunting skills
- (C) peaceful migration
- (D) increased population

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

These people had a significant linguistic impact on the continent as well.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Agriculture and iron working probably spread to Africa from neighboring regions.

**Answer choices**

- (A) Once Africans developed their own crops, they no longer borrowed from other regions.
- (B) The harshness of the African climate meant that agriculture could not develop until after the introduction of iron tools.
- (C) The use of livestock improved transportation and trade and allowed for new forms of political control.
- (D) As the Sahara expanded, the camel gained in importance, eventually coming to have religious significance.
- (E) The spread of iron working had far-reaching effects on social, economic, and political organization in Africa.
- (F) Today’s Bantu-speaking peoples are descended from a technologically advanced people who spread throughout Africa.

### 参考答案与解析

1. 选 **C**。diffuse 扩散，emerge 不对；只理解 idea 肯定不行，要去做，understood 不对；原文的 idea 没有更深入一步的意思，develop 不对。
2. 选 **B**。以 developed independently 和 agriculture 做关键词定位至第二句，但这句话只说非洲的农业与近东以及地中海地区相关，如果知道近东是亚洲的一部分和非洲的一部分的总称的话，答案就出来了，B 正确；不知道的话往后看，下面还有一句提到了 agriculture，就是第五句说农业是从亚洲来的，因为那些作物不是非洲原产的，所以答案是 B。
3. 选 **D**。以 changes of African environment 做关键词定位至原文第三句，注意题目中的关键词原文没有，但原文中的 drying up of what is now the Sahara desert 就是一个环境变化。干旱把这些人赶到了撒哈拉以南地区，也就是说这个变化使得他们原来住的地方不能住了，所以 D 正确；A 说气候变得温和，与原文相反；B 说他们回到原来的地方，与原文说的定居在南部非洲相反；C 没有相关信息。
4. 选 **D**。以 camel 做关键词定位至倒数第二句，说 camel 在一世纪引入，然后就说这个非常重要，后面就是重要的原因，所以 D 正确。
5. 选 **A**。以 rock painting 做关键词定位至第四句，所以很明显答案是 A。
6. 选 **B**。问整段在文章中的作用，看首句。说铁也是从西亚来的，但跟农业扩散的线路不同，所以答案是 B，亚洲对非洲的除农业之外的影响；A 没说；C 和 D 只是细节，不足以呈现整段的作用。
7. 选 **B**。profound 深刻的，意义深远的，所以 far-reaching 是正确答案。
8. 选 **C**。ritual 仪式的，常规的，所以 ceremonial 仪式的正确。
9. 选 **A**。EXCEPT 题，排除法，A 没说，所以选；B 的 warriors 在倒数第二句，正确，不选；C 中的 food supply 虽然原文没有，但原文倒数第二句有 land more productive，说明这个选项对，不选；D 的 religious power 在最后一句，正确，不选。
10. 选 **B**。本句的结构是，和美洲不同，非洲人制铁比较早，后面自 developing 开始全是状语后置，不看；A 错，因为原文没说美洲人用的是最新的技术，只是说他们炼铁比较晚；B 的结构与原文完全一致，对；C 的前半句是对的，但后面给出的原因完全是瞎凑的，错；原文将非洲和美洲进行比较，而 D 将两者放在一起，所以 D 错。
11. 选 **C**。flee 逃跑，所以 C 正确。原句说迁徙是由人口增加导致的，然后这些人是为怎么样撒哈拉沙漠的干旱才迁移的，逃避是正确意思；因为已经干了，所以不是害怕，afraid of 不对；人不能被干旱替代，所以 displace by 不对；respond to 答复完全不靠谱。
12. 选 **B**。EXCEPT 题，排除法，A 在倒数第二句，正确，不选；B 错，选，因为原文只说武器能够帮他们战胜打猎的对手，没说他们打猎的技术好；C 和 D 都在最后一句，正确，不选。
13. 选 **B**。两个过渡点，these people 和 linguistic impact。these people 说明前面必须得有 people，这点 A/B/C 都符合；linguistic 说明必须说到语言，B/C 可能；而且 B 点之后的内容是解释待插入句的，所以应该插入 B 而非 C。
14. 选 **CEF**。A 选项原文没说，不选；B 选项原文没说，不选；C 选项对应原文第二段，正确；D 选项文没说，注意有宗教意义的不是骆驼，不选；E 选项对应原文第四段第一句，正确；F 选项对应原文第六段，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## The Rise of Teotihuacán

The city of Teotihuacán, which lay about 50 kilometers northeast of modern-day Mexico City, began its growth by 200–100 B.C. At its height, between about A.D. 150 and 700, it probably had a population of more than 125,000 people and covered at least 20 square kilometers. ■ It had over 2,000 apartment complexes, a great market, a large number of industrial workshops, an administrative center, a number of massive religious edifices, and a regular grid pattern of streets and buildings. ■ Clearly, much planning and central control were involved in the expansion and ordering of this great metropolis. ■ Moreover, the city had economic and perhaps religious contacts with most parts of Mesoamerica (modern Central America and Mexico). ■

How did this tremendous development take place, and why did it happen in the Teotihuacán Valley? Among the main factors are Teotihuacán's geographic location on a natural trade route to the south and east of the Valley of Mexico, the obsidian resources in the Teotihuacán Valley itself, and the valley's potential for extensive irrigation. The exact role of other factors is much more difficult to pinpoint—for instance, Teotihuacán's religious significance as a shrine, the historical situation in and around the Valley of Mexico toward the end of the first millennium B.C., the ingenuity and foresightedness of Teotihuacán's elite, and, finally, the impact of natural disasters, such as the volcanic eruptions of the late first millennium B.C.

This last factor is at least circumstantially implicated in Teotihuacán's rise. Prior to 200 B.C., a number of relatively small centers coexisted in and near the Valley of Mexico. Around this time, the largest of these centers, Cuicuilco, was seriously affected by a volcanic eruption, with much of its agricultural land covered by lava. With Cuicuilco eliminated as a potential rival, any one of a number of relatively modest towns might have emerged as a leading economic and political power in Central Mexico. The archaeological evidence clearly indicates, though, that Teotihuacán was the center that did arise as the predominant force in the area by the first century A.D.

It seems likely that Teotihuacán's natural resources, along with the city elite's ability to recognize their potential, gave the city a competitive edge over its neighbors. The valley, like many other places in Mexican and Guatemalan highlands, was rich in obsidian. The hard volcanic stone was a resource that had been in great demand for many years, at least since the rise of the Olmecs (a people who flourished between 1200 and 400 B.C.), and it apparently had a secure market. Moreover, recent research on obsidian tools found at Olmec sites has shown that some of the obsidian obtained by the Olmecs originated near Teotihuacán. Teotihuacán obsidian must have been recognized as a valuable commodity for many centuries before the great city arose.

Long-distance trade in obsidian probably gave the elite residents of Teotihuacán access to a wide variety of exotic goods, as well as a relatively prosperous life. Such success may have attracted immigrants to Teotihuacán. In addition, Teotihuacán's elite may have consciously attempted to attract new inhabitants. It is also probable that as early as 200 B.C. Teotihuacán may have achieved some religious significance and its shrine (or shrines) may have served as an additional population magnet. Finally, the growing population was probably fed by increasing the number and size of irrigated fields.

The picture of Teotihuacán that emerges is a classic picture of positive feedback among obsidian mining and working, trade, population growth, irrigation, and religious tourism. The thriving obsidian operation, for example, would necessitate more miners, additional manufacturers of obsidian tools, and additional traders to carry the goods to new markets. All this led to increased wealth, which in turn would attract more immigrants to Teotihuacán. The growing power of the elite, who controlled the economy, would give them the means to physically coerce people to move to Teotihuacán and serve as additions to the labor force. More irrigation works would have to be built to feed the growing population, and this resulted in more power and wealth for the elite.

1. The word “**massive**” in the passage is closest in meaning to
  - (A) ancient
  - (B) carefully
  - (C) very large
  - (D) carefully protected
2. In paragraph 1, each of the following is mentioned as a feature of the city of Teotihuacán between A.D. 150 and 700 EXCEPT
  - (A) regularly arranged streets
  - (B) several administrative centers spread across the city
  - (C) many manufacturing workshops
  - (D) apartment complexes
3. The word “**pinpoint**” in the passage is closest in meaning to
  - (A) identify precisely
  - (B) make an argument for
  - (C) describe
  - (D) understand
4. The word “**ingenuity**” in the passage is closest in meaning to
  - (A) ambition
  - (B) sincerity
  - (C) faith
  - (D) cleverness
5. Which of the following is NOT mentioned in paragraph 2 as a main factor in the development of Teotihuacán?
  - (A) The presence of obsidian in the Teotihuacán Valley
  - (B) The potential for extensive irrigation of Teotihuacán Valley lands
  - (C) A long period of volcanic inactivity in the Teotihuacán Valley
  - (D) Teotihuacán’s location on a natural trade route
6. Which of the following can be inferred from paragraphs 2 and 3 about the volcanic eruptions of the late first millennium B.C.?
  - (A) They were more frequent than historians once thought.
  - (B) They may have done more damage to Teotihuacán than to neighboring centers.
  - (C) They may have played a major role in the rise of Teotihuacán.
  - (D) They increased the need for extensive irrigation in the Teotihuacán Valley.
7. What can be inferred from paragraph 3 about Cuicuilco prior to 200 B.C.?
  - (A) It was a fairly small city until that date.
  - (B) It was located outside the Valley of Mexico.
  - (C) It emerged rapidly as an economical and political center.
  - (D) Its economy relied heavily on agriculture.
8. The word “**predominant**” in the passage is closest in meaning to
  - (A) most aggressive
  - (B) most productive
  - (C) principal
  - (D) earliest
9. Which of the following allowed Teotihuacán to have “a competitive edge over its neighbors”?
  - (A) A well-exploited and readily available commodity
  - (B) The presence of a highly stable elite class
  - (C) Knowledge derived directly from the Olmecs about the art of toolmaking
  - (D) Scarce natural resources in nearby areas such as those located in what are now the Guatemalan and Mexican highlands
10. According to paragraph 4, what has recent research on obsidian tools found at Olmec sites shown?
  - (A) Obsidian’s value was understood only when Teotihuacán became an important city.
  - (B) The residents of Teotihuacán were sophisticated toolmakers.

- (C) The residents of Teotihuacán traded obsidian with the Olmecs as early as 400 B.C.
- (D) Some of the obsidian used by the Olmecs came from the area around Teotihuacán.

**11. Select the TWO answer choices that are mentioned in paragraph 5 as being features of Teotihuacán that may have attracted immigrants to the city. To receive credit, you must select TWO answers.**

- (A) The prosperity of the elite
- (B) Plenty of available housing
- (C) Opportunities for well-paid agricultural employment
- (D) The presence of one or more religious shrines

**12. In paragraph 6, the author discusses “The thriving obsidian operation” in order to**

- (A) explain why manufacturing was the main industry of Teotihuacán
- (B) give an example of an industry that took very little time to develop in Teotihuacán
- (C) illustrate how several factors influenced each other to make Teotihuacán a powerful and wealthy city
- (D) explain how a successful industry can be a source of wealth and a source of conflict at the same time

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In fact, artifacts and pottery from Teotihuacán have been discovered in sites as far away as the Mayan lowlands, the Guatemalan highlands, northern Mexico, and the Gulf Coast of Mexico.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Teotihuacán was a highly developed city in Mesoamerica that reached its peak between about A.D. 150 and 700.

**Answer choices**

- (A) The number and sophistication of the architectural, administrative, commercial, and religious features of Teotihuacán indicate the existence of centralized planning and control.
- (B) Teotihuacán may have developed its own specific local religion as a result of the cultural advances made possible by the city's great prosperity.
- (C) As a result of its large number of religious shrines, by the first century A.D., Teotihuacán became the most influential religious center in all of Mesoamerica.
- (D) Several factors may account for Teotihuacán's extraordinary development, including its location, rich natural resources, irrigation potential, intelligent elite, and the misfortune of rival communities.
- (E) In many important areas, from the obsidian industry to religious tourism, Teotihuacán's success and prosperity typified the classic positive feedback cycle.
- (F) Although many immigrants settled in Teotihuacán between A.D. 150 and 700, the increasing threat of coerced labor discouraged further settlement and limited Teotihuacán's population growth.

## 参考答案与解析

1. 选 **C**。massive 大量的，所以 C 是正确答案。A 古老地、B 仔细地、D 保护得好地都不对。
2. 选 **B**。EXCEPT 题，排除法。A 的 streets 定位至倒数第三句，正确，不选；B 的 administrative centers 定位至倒数第三句，原文说有一个中心，没说很多，所以 B 错，选；C 的 workshops 定位至倒数第三句，正确，不选；D 的 apartment complex 定位至倒数第三句，正确，不选。
3. 选 **A**。pinpoint 精确定位，所以 A 的 identify precisely 正确。
4. 选 **D**。ingenuity 心灵手巧，精巧，所以 D 的 cleverness 正确，A 野心、B 诚恳、C 信仰都不对。
5. 选 **C**。EXCEPT 题，排除法。A 的 obsidian 定位至第二句，正确，不选；B 的 extensive irrigation 定位至第二句，正确，不选；C 的 volcanic inactivity 原文没有对应，所以 C 错，选；D 的 trade route 定位至第二句，正确，不选。
6. 选 **C**。以 volcanic eruptions of the late first millennium B.C. 做关键词定位至第二段最后一句，这个是诸多 factor 当中的一个，而这些 factor 都是促进 T 城发展的，所以答案是 C。也可以排除法，A 无相关信息；第三段第三句说火山对 T 影响很大，没跟其他的比较，B 错；第二段第二句说到了 irrigation，但与问题无关，错。
7. 选 **D**。以 Cuicuilco 定位至第三段第二句，说 Cui 这个地方受火山活动影响，农田被 lava 覆盖，接着一句就说 Cui 消除了，所以没有农田就没有 Cui，答案是 D。A 与原文说反，应该是大的，不是小的；B 的 outside 和原文中的 in 说反，错；C 中的 rapidly 没说，错。
8. 选 **C**。predominant 主要的，占显著优势的；所以 C 的 principal 主要的正确。A 激进的、B 物产丰富的、D 最早的都无关。
9. 选 **A**。关键词已经划出，所在句说 natural resource 给了这个地方 edge，然后就用大量笔墨说 obsidian 黑曜石是这里一种很主要的资源，所以答案是存在 commodity，A 正确；注意 B 项颇具干扰性，使城市有优势的 not elite，是他们对于这种潜力的认识；C 完全没提到；D 说到了资源，但又说资源是在邻近的地方，也错。
10. 选 **D**。以 Olmec sites 和 recent research 做关键词定位至倒数第二句，表明 O 获得一些 obsidian 是产自 T 的，很明显 D 正确。
11. 选 **AD**。以 immigrants 做关键词定位至第二句，说 such success 是吸引移民的原因，所以一定要看第一句，根据这句能选出答案 A，但注意这道题必须选两个选项才有分数，所以还要继续找。第三句开始就是一个 in addition，说明还有原因，说精英阶层会有意吸引移民，但这个答案没有，所以只能再往下，就看到答案 D，所以 A 和 D 正确，另外两个都没说。
12. 选 **C**。修辞目的题，往前看，前一句就是本段中心，说 T 的兴起是黑曜石开采和其他一系列因素互动的结果，所以 C 正确。A 和 B 彻底没说，D 中的 conflict 冲突没说，也不对。
13. 选 **D**。四个地名是过渡点，说明正确插入点之前必须有说到位置的，而四个选项中只有 D 之前有 Mesoamerica，所以答案只能是 D。排除法也可以，A 之后的代词 it 只第一句中的主语 T，过渡紧密，不选；B 之后的 planning 和 metropolis 对应 B 之前的一系列设施，过渡紧密，不选；C 之后的 moreover 与之前过渡紧密，不选。
14. 选 **ADE**。A 选项对应第一段倒数第二句，正确；B 选项原文没说，不选；C 选项错，第五段提到了 shrine，但只说它能吸引外来人口，没说 T 因为这个变得很重要，不选；D 选项对应第二段第一句，正确；E 选项对应第六段第一句，正确；F 选项原文没说，不选。

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## Extinction of the Dinosaurs

Paleontologists have argued for a long time that the demise of the dinosaurs was caused by climatic alterations associated with slow changes in the positions of continents and seas resulting from plate tectonics. Off and on throughout the Cretaceous (the last period of the Mesozoic era, during which dinosaurs flourished), large shallow seas covered extensive areas of the continents. Data from diverse sources, including geochemical evidence preserved in seafloor sediments, indicate that the Late Cretaceous climate was milder than today's. The days were not too hot, nor the nights too cold. The summers were not too warm, nor the winters too frigid. The shallow seas on the continents probably buffered the temperature of the nearby air, keeping it relatively constant.

At the end of the Cretaceous, the geological record shows that these seaways retreated from the continents back into the major ocean basins. No one knows why. Over a period of about 100,000 years, while the seas pulled back, climates around the world became dramatically more extreme: warmer days, cooler nights; hotter summers, colder winters. Perhaps dinosaurs could not tolerate these extreme temperature changes and became extinct.

If true, though, why did cold-blooded animals such as snakes, lizards, turtles, and crocodiles survive the freezing winters and torrid summers? These animals are at the mercy of the climate to maintain a livable body temperature. It's hard to understand why they would not be affected, whereas dinosaurs were left too crippled to cope, especially if, as some scientists believe, dinosaurs were warm-blooded. Critics also point out that the shallow seaways had retreated from and advanced on the continents numerous times during the Mesozoic, so why did the dinosaurs survive the climatic changes associated with the earlier fluctuations but not with this one? Although initially appealing, the hypothesis of a simple climatic change related to sea levels is insufficient to explain all the data.

Dissatisfaction with conventional explanations for dinosaur extinctions led to a surprising observation that, in turn, has suggested a new hypothesis. **Many plants and animals disappear abruptly from the fossil record as one moves from layers of rock documenting the end of the Cretaceous up into rocks representing the beginning of the Cenozoic (the era after the Mesozoic).** Between the last layer of Cretaceous rock and the first layer of Cenozoic rock, there is often a thin layer of clay. Scientists felt that they could get an idea of how long the extinctions took by determining how long it took to deposit this one centimeter of clay and they thought they could determine the time it took to deposit the clay by determining the amount of the element iridium (Ir) it contained.

Ir has not been common at Earth's since the very beginning of the planet's history. Because it usually exists in a metallic state, it was preferentially incorporated in Earth's core as the planet cooled and consolidated. Ir is found in high concentrations in some meteorites, in which the solar system's original chemical composition is preserved. Even today, microscopic meteorites continually bombard Earth, falling on both land and sea. By measuring how many of these meteorites fall to Earth over a given period of time, scientists can estimate how long it might have taken to deposit the observed amount of Ir in the boundary clay. ■ These calculations suggest that a period of about one million years would have been required. ■ However, other reliable evidence suggests that the deposition of the boundary clay could not have taken one million years. ■ So the unusually high concentration of Ir seems to require a special explanation. ■

In view of these facts, scientists hypothesized that a single large asteroid, about 10 to 15 kilometers across, collided with Earth, and the resulting fallout created the boundary clay. Their calculations show that the impact kicked up a dust cloud that cut off sunlight for several months, inhibiting photosynthesis in plants; decreased surface temperatures on continents to below freezing; caused extreme episodes of acid rain; and significantly raised long-term global temperatures through the greenhouse effect. This disruption of food chain and climate would have eradicated the dinosaurs and other organisms in less than fifty years.

1. **According to paragraph 1, which of the following is true of the Late Cretaceous climate?**
  - (A) Summers were very warm and winters were very cold.
  - (B) Shallow seas on the continents caused frequent temperature changes.
  - (C) The climate was very similar to today's climate.
  - (D) The climate did not change dramatically from season to season.
2. **Which of the following reasons is suggested in paragraph 2 for the extinction of the dinosaurs?**
  - (A) Changes in the lengths of the days and nights during the late Cretaceous period
  - (B) Droughts caused by the movement of seaways back into the oceans
  - (C) The change from mild to severe climates during the Late Cretaceous period
  - (D) An extreme decrease in the average yearly temperature over 10,000 years
3. **Why does the author mention the survival of "snakes, lizards, turtles, and crocodiles" in paragraph 3?**
  - (A) To argue that dinosaurs may have become extinct because they were not cold-blooded animals
  - (B) To question the adequacy of the hypothesis that climatic change related to sea levels caused the extinction of the dinosaurs
  - (C) To present examples of animals that could maintain a livable body temperature more easily than dinosaurs
  - (D) To support a hypothesis that these animals were not as sensitive to climate changes in the Cretaceous period as they are today
4. **The word "cope" in the passage is closest in meaning to**
  - (A) adapt
  - (B) move
  - (C) continue
  - (D) compete
5. **According to paragraph 3, which of the following is true of changes in climate before the Cretaceous period and the effect of these changes on dinosaurs?**
  - (A) Climate changes associated with the movement of seaways before the Cretaceous period did not cause dinosaurs to become extinct.
  - (B) Changes in climate before the Cretaceous period caused severe fluctuations in sea level, resulting in the extinction of the dinosaurs.
  - (C) Frequent changes in climate before the Cretaceous period made dinosaurs better able to maintain a livable body temperature.
  - (D) Before the Cretaceous period there were few changes in climate, and dinosaurs flourished.
6. **The word "fluctuations" in the passage is closest in meaning to**
  - (A) extremes
  - (B) retreats
  - (C) periods
  - (D) variations
7. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? In correct choices change the meaning in important ways or leave out essential information.**
  - (A) The fossil record suggests that there was an abrupt extinction of many plants and animals at the end of the Mesozoic era.
  - (B) Few fossils of the Mesozoic era have survived in the rocks that mark the end of the Cretaceous.
  - (C) Fossils from the Cretaceous period of the Mesozoic up to the beginning of the Cenozoic era have been removed from the layers of rock that surrounded them.
  - (D) Plants and animals from the Mesozoic era were unable to survive in the Cenozoic era.
8. **In paragraph 4, all the following questions are answered EXCEPT**
  - (A) Why is there a layer of clay between the rocks of the Cretaceous and Cenozoic?
  - (B) Why were scientists interested in determining how long it took to deposit the layer of clay at the end of the Cretaceous?
  - (C) What was the effect of the surprising observation scientists made?

- (D) Why did scientists want more information about the dinosaur extinctions at the end of the Cretaceous?

**9. The word “bombard” in the passage is closest in meaning to**

- (A) approach  
(B) strike  
(C) pass  
(D) circle

**10. Paragraph 5 implies that a special explanation of Ir in the boundary clay is needed because**

- (A) the Ir in microscopic meteorites reaching Earth during the Cretaceous period would have been incorporated into Earth’s core  
(B) the Ir in the boundary clay was deposited much more than a million years ago  
(C) the concentration of Ir in the boundary clay is higher than in microscopic meteorites  
(D) the amount of Ir in the boundary clay is too great to have come from microscopic meteorites during the time the boundary clay was deposited

**11. The word “disruption” in the passage is closest in meaning to**

- (A) exhaustion  
(B) disturbance  
(C) modification  
(D) disappearance

**12. Paragraph 6 mentions all of the following effects of the hypothesized asteroid collision EXCEPT**

- (A) a large dust cloud that blocked sunlight  
(B) an immediate drop in the surface temperatures of the continents  
(C) an extreme decrease in rainfall on the continents  
(D) a long-term increase in global temperatures

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Consequently, the idea that the Ir in the boundary clay came from microscopic meteorites cannot be accepted.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

For a long time scientists have argued that the extinction of the dinosaurs was related to climate change.

**Answer choices**

- (A) A simple climate change does not explain some important data related to the extinction of the dinosaurs at the end of the Cretaceous.  
(B) The retreat of the seaways at the end of the Cretaceous has not been fully explained.  
(C) The abruptness of extinctions at the end of the Cretaceous and the high concentration of Ir found in clay deposited at that time have fueled the development of a new hypothesis.  
(D) Extreme changes in daily and seasonal climates preceded the retreat of the seas back into the major ocean basins.  
(E) Some scientists hypothesize that the extinction of the dinosaurs resulted from the effects of an asteroid collision with Earth.  
(F) Boundary clay layers like the one between the Mesozoic and Cenozoic are used by scientists to determine the rate at which an extinct species declined.

### 参考答案与解析

1. 选 **D**。以 Late Cretaceous climate 做关键词定位至倒数第四句，说比现在更温和，所以 D 是答案。C 说跟现在 similar，错；后面 blabla 说了一堆，A 与倒数第二句相反，错；B 与最后一句相反，错。
2. 选 **C**。以 extinction of the dinosaurs 做关键词定位至最后一句，原句说不能忍受这些极端温度的恐龙灭绝了，因为有个 these，所以往上看一句，说冬天很冷夏天很热，所以 C 是答案。ABD 没说。
3. 选 **B**。先读所在句，说为什么诸如 blabla 之类的动物能耐得住这种极端气候呢，而且这句一开始就来了个 if true，所以应该是作者在质疑上端所提出的结论的正确性，而且最后一句是本段的中心句，说将气候变化的原因归于 sea level 是不对的，所以答案是 B。
4. 选 **A**。cope 应付，所以 A 的 adapt 适应正确。
5. 选 **A**。以 before the Cretaceous period 定位，但注意原文中与之对应的是倒数第二句的 earlier，问为什么恐龙在之前的动荡中生存了下来而这次没有，所以 A 是答案，说之前的变化没有引起恐龙灭绝。B 说反了；C 的恐龙 better able to maintain 原文没说；D 的恐龙 flourish 繁盛没说。
6. 选 **D**。fluctuation 波动，D 的 variation 正确。
7. 选 **A**。原文的结构是 blabla 的时候 plants and animals 从化石中消失了。A 正确；B 错，原文没说 few fossil；C 把非主干部分变成了主干，而且 remove 也没说；D 选项缺了原文里化石这个很重要的信息，错。
8. 选 **A**。EXCEPT 题，排除法。A 的 layer of clay 定位至倒数第二句，但原文只是说有 layer，没说为什么有，所以 A 的问题没得到回答，选；B 的 how long 和 deposit 定位至最后一句，正确，不选；C 的 surprising observation 对应第一句和第二句，正确，不选；D 对应第一句，说对传统理论的不满导致了一个 observation 和相应的假说，所以 D 正确，不选。
9. 选 **B**。bombard 炮轰，所以 B 的 strike 正确。
10. 选 **D**。以 special explanation 做关键词定位至最后一句，问题问的是需要解释的原因，所以看前一句，说 boundary clay 的沉积不要花一百万年。前面说沉积那么多 Ir 需要一百万年，所以答案是 D，boundary clay 的沉积时间和 Ir 的沉积时间对不上；A 和 C 原文都没说；B 说反了。
11. 选 **B**。disruption 打断，所以 B 的 disturbance 正确。
12. 选 **C**。EXCEPT 题，排除法。A 的 dust cloud，B 的 drop in the surface temperatures 和 D 的 increase in global temperatures 都能定位至第二句，都正确，不选；C 的 rainfall 原文没说，错，选。
13. 选 **C**。三个过渡点，boundary clay，Ir 和 consequently，根据 boundary clay 的话 A/B/C 可能是答案，根据 Ir 的话 C 或者 D 可能是答案，所以初定答案是 C。A 点之后说需要一百万年，B 点之后的句子说没有一百万年，所以 B 前后的转折过渡紧密，B 排除；而且既然没有一百万年，说明前面的理论不成立，所以待插入句中的 consequently 插入 C 的时候因果关系成立，所以 C 是答案。
14. 选 **ACE**。A 选项对应原文第三段最后一句，正确；B 选项对应原文第二段第一句，但这句是气候变化原因的一部分，细节，不选；C 选项对应原文第四段第一句，正确；D 选项原文没说，不选；E 选项对应原文第六段第一句，正确；F 选项原文没说，不选。

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**Running Water on Mars**

Photographic evidence suggests that liquid water once existed in great quantity on the surface of Mars. Two types of flow features are seen: runoff channels and outflow channels. Runoff channels are found in the southern highlands. These flow features are extensive systems—sometimes hundreds of kilometers in total length—of interconnecting, twisting channels that seem to **merge** into larger, wider channels. They bear a strong resemblance to river systems on Earth, and geologists think that they are dried-up beds of long-gone rivers that once carried rainfall on Mars from the mountains down into the valleys. Runoff channels on Mars speak of a time 4 billion years ago (the age of the Martian highlands), when the atmosphere was thicker, the surface warmer, and liquid water widespread.

Outflow channels are probably **relics** of catastrophic flooding on Mars long ago. ■ They appear only in equatorial regions and generally do not form extensive interconnected networks. ■ Instead, they are probably the paths taken by huge volumes of water draining from the southern highlands into the northern plains. ■ The onrushing water arising from these flash floods likely also formed the odd teardrop-shaped “islands” (resembling the **miniature** versions seen in the wet sand of our beaches at low tide) that have been found on the plains close to the ends of the outflow channels. ■ Judging from the width and depth of the channels, the flow rates must have been truly enormous—perhaps as much as a hundred times greater than the 105 tons per second carried by the great Amazon River. Flooding shaped the outflow channels approximately 3 billion years ago, about the same times as the northern volcanic plains formed.

Some scientists speculate that Mars may have enjoyed an extended early Period during which rivers, lakes, and perhaps even oceans adorned its surface. A 2003 Mars Global Surveyor image shows what mission specialists think may be a delta—a fan-shaped network of channels and sediments where a river once flowed into a larger body of water, in this case a lake filling a crater in the southern highlands. Other researchers go even further, suggesting that the data provide evidence for large open expanses of water on the early Martian surface. A computer-generated view of the Martian North Polar Region shows the extent of what may have been an ancient ocean covering much of the northern lowlands. The Hellas Basin, which measures some 3,000 kilometers across and has a floor that lies nearly 9 kilometers below the basin’s rim, is another candidate for an ancient Martian sea.

These ideas remain controversial. Proponents point to features such as the terraced “beaches” shown in one image, which could conceivably have been left behind as a lake or ocean evaporated and the shoreline receded. **But detractors maintain that the terraces could also have been created by geological activity, perhaps related to the geologic forces that depressed the Northern Hemisphere far below the level of the south, in which case they have nothing whatever to do with Martian water.** Furthermore, Mars Global Surveyor data released in 2003 seem to indicate that the Martian surface contains too few carbonate rock layers—layers containing compounds of carbon and oxygen—that should have been formed in abundance in an ancient ocean. Their absence supports the picture of a cold, dry Mars that never experienced the extended mild period required to form lakes and oceans. However, more recent data imply that at least some parts of the planet did in fact experience long periods in the past during which liquid water existed on the surface.

Aside from some small-scale gullies (channels) found since 2000, which are inconclusive, astronomers have no direct evidence for liquid water anywhere on the surface of Mars today, and the amount of water vapor in the Martian atmosphere is tiny. Yet even setting aside the unproven **hints** of ancient oceans, the extent of the outflow channels suggests that a huge total volume of water existed on Mars in the past. Where did all the water go? The answer may be that virtually all the water on Mars is now locked in the permafrost layer under the surface, with more contained in the planet’s polar caps.

1. The word “merge” in the passage is closest in meaning to
  - (A) expand
  - (B) separate
  - (C) straighten out
  - (D) combine
2. What does the discussion in paragraph 1 of runoff channels in the southern highlands suggest about Mars?
  - (A) The atmosphere of Mars was once thinner than it is today.
  - (B) Large amounts of rain once fell on parts of Mars.
  - (C) The river systems of Mars were once more extensive than Earth’s.
  - (D) The rivers of Mars began to dry up about 4 billion years ago.
3. The word “relics” in the passage is closest in meaning to
  - (A) remains
  - (B) sites
  - (C) requirements
  - (D) sources
4. The word “miniature” in the passage is closest in meaning to
  - (A) temporary
  - (B) small
  - (C) multiple
  - (D) familiar
5. In paragraph 2, why does the author include the information that 105 tons of water flow through the Amazon River per second?
  - (A) To emphasize the great size of the volume of water that seems to have flowed through Mars’ outflow channels
  - (B) To indicate data used by scientists to estimate how long ago Mars’ outflow channels were formed
  - (C) To argue that flash floods on Mars may have been powerful enough to cause tear-shaped “islands” to form
  - (D) To argue that the force of flood waters on Mars was powerful enough to shape the northern volcanic plains
6. According to paragraph 2, all of the following are true of the outflow channels on Mars EXCEPT
  - (A) They formed at around the same time that volcanic activity was occurring on the northern plains.
  - (B) They are found only on certain parts of the Martian surface.
  - (C) They sometimes empty onto what appear to have once been the wet sands of tidal beaches.
  - (D) They are thought to have carried water northward from the equatorial regions.
7. All of the following questions about geological features on Mars are answered in paragraph 3 EXCEPT
  - (A) What are some regions of Mars that may have once been covered with an ocean?
  - (B) Where do mission scientists believe that the river forming the delta emptied?
  - (C) Approximately how many craters on Mars do mission scientists believe may once have been lakes filled with water?
  - (D) During what period of Mars’ history do some scientists think it may have had large bodies of water?
8. According to paragraph 3, images of Mars’ surface have been interpreted as support for the idea that
  - (A) the polar regions of Mars were once more extensive than they are now
  - (B) a large part of the northern lowlands may once have been under water
  - (C) deltas were once a common feature of the Martian landscape
  - (D) the shape of the Hellas Basin has changed considerably over time
9. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- (A) But detractors argue that geological activity may be responsible for the water associated with the terraces.
- (B) But detractors argue that the terraces may have been formed by geological activity rather than by the presence of water.
- (C) But detractors argue that the terraces may be related to geological forces in the Northern Hemisphere of Mars, rather than to Martian water in the south.
- (D) But detractors argue that geological forces depressed the Northern Hemisphere so far below the level of the south that the terraces could not have been formed by water.

**10. According to paragraph 4, what do the 2003 Global Surveyor data suggest about Mars?**

- (A) Ancient oceans on Mars contained only small amounts of carbon.
- (B) The climate of Mars may not have been suitable for the formation of large bodies of water.
- (C) Liquid water may have existed on some parts of Mars' surface for long periods of time.
- (D) The ancient oceans that formed on Mars dried up during periods of cold, dry weather.

**11. The word "hints" in the passage is closest in meaning to**

- (A) clues
- (B) features
- (C) arguments
- (D) effects

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

These landscape features differ from runoff channels in a number of ways.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

There is much debate concerning whether Mars once had water.

**Answer choices**

- (A) Mars' runoff and outflow channels are large-scale, distinctive features that suggest that large quantities of liquid water once flowed on Mars.
- (B) Although some researchers claim that Mars may once have had oceans, others dispute this, pointing to an absence of evidence or offering alternative interpretations of evidence.
- (C) Various types of images have been used to demonstrate that most of Martian surface contains evidence of flowing water.
- (D) The runoff and outflow channels of Mars apparently carried a higher volume of water and formed more extensive networks than do Earth's river systems.
- (E) There is very little evidence of liquid water on Mars today, and it is assumed that all the water that once existed on the planet is frozen beneath its surface.
- (F) While numerous gullies have been discovered on Mars since 2000, many astronomers dismiss them as evidence that Mars once had liquid water.

### 参考答案与解析

1. 选 **A**。merge 合并，所以 D 的 combine 正确。
2. 选 **B**。以 runoff channels 和 southern highlands 做关键词定位至第三句，但问题问的是表明了什么，关键词所在句明显没说，直到最后一句才说 speak of blabla，答案在最后一句，B 正确；A 和 D 说反了；C 没说。
3. 选 **A**。relics 遗迹，所以 A 的 remains 正确。
4. 选 **B**。miniature 小型的、微结构，small 正确。
5. 选 **A**。修辞目的题，往前看，本句修辞点之前有破折号，证明这个 105 ton 是解释前面内容的。之前说那些 channel 的水流量非常大，然后马上出现了一个 105 tons 的例子，所以答案是 A。
6. 选 **C**。EXCEPT 题，排除法。A 的 volcanic activity 做关键词定位至最后一句，正确，不选；B 的 certain parts 与原文第二句的 equatorial regions 同义重合，正确，不选；C 的 beaches 做关键词定位至倒数第三句，但原文说洪水形成的小岛形状像海滩上的沙子，跟 C 说的不同，所以 C 错，选；D 的 northward 做关键词定位至第三句，再结合第二句，说明 D 正确，不选。
7. 选 **C**。EXCEPT 题，排除法。A 的 regions 做关键词定位至第二句的后半部分和倒数第二句，正确，不选；B 的 delta 做关键词定位至原文第二句，正确，不选；C 的 craters 做关键词定位至第二句，但原文只说有 crater 被填满，没说几个，所以 C 错，选；D 的 large bodies of water 与第一句的 rivers, lakes and even oceans 同义，正确，不选。
8. 选 **B**。排除法。A 的 polar 做关键词定位至倒数第二句，原文没说比现在更 extensive，错，不选；同时这句话说明北部的 lowland 可能是个 ancient ocean，与 B 选项说的在水下是同义重现，所以 B 正确，选；C 的 deltas 做关键词定位至第二句，原文没说 common，错，不选；D 的专有名词定位至最后一句，没说变化，错，不选。
9. 选 **B**。从句套并列句，原句说 detractors 认为 terrace 是由地质活动而非水的原因形成的；A 错，水和地质活动是对等的两面，不是因果关系；C 的 southern 和 northern 偷换原文概念，错；D 与 A 的错误类似，原文的地质活动和水是并列，不是这里的 so that，错。
10. 选 **B**。以 2003 Global Surveyor data 做关键词定位至第四句，说没有 carbonate，而 carbonate 是大洋中经常有的，也就是说火星上没有 ocean，而且下一句说 cold dry 火星，所以 B 正确。
11. 选 **A**。hint 暗示，示意，所以 A 的 clue 正确。
12. 选 **A**。两个过渡点，these landscape features 和 a number of ways，特别注意 a number of ways 应该是个提纲性的句子，所以应该往前插，后面的若干句话都在叙述 outflow 与 runoff channel 的不同，所以 A 正确。these landscape features 指代前面的 relics of catastrophic flooding。
13. 选 **ABE**。A 选项对应原文第一段三四句和第二段第一句，正确；B 选项对应原文第三段和第四段的第一句，正确；C 选项对应第一段第一句，但原文没说相片有 various type，不选；D 选项对应第一段倒数第二句，但原文没有将火星和地球进行比较，不选；E 选项对应第五段第一句和最后一句，正确；F 选项对应第五段第一句，但原文说没有证据，答案说 dismiss 证据，说反，错。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时： 分 秒

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错误： 个

## The Arrival of Plant Life in Hawaii

When the Hawaiian Islands emerged from the sea as volcanoes, starting about five million years ago, they were far removed from other landmasses. Then, as blazing sunshine alternated with drenching rains, the harsh, barren surfaces of the black rocks slowly began to soften. Winds brought a variety of life-forms.

Spores light enough to float on the breezes were carried thousands of miles from more ancient lands and deposited at random across the bare mountain flanks. A few of these spores found a toehold on the dark, forbidding rocks and grew and began to work their transformation upon the land. Lichens were probably the first successful flora. These are not single individual plants; each one is a symbiotic combination of an alga and a fungus. The algae capture the sun's energy by photosynthesis and store it in organic molecules. The fungi absorb moisture and mineral salts from the rocks, passing these on in waste products that nourish algae. **It is significant that the earliest living things that built communities on these islands are examples of symbiosis, a phenomenon that depends upon the close cooperation of two or more forms of life and a principle that is very important in island communities.**

Lichens helped to speed the decomposition of the hard rock surfaces, preparing a soft bed of soil that was abundantly supplied with minerals that had been carried in the molten rock from the bowels of Earth. Now, other forms of life could take hold: ferns and mosses (two of the most ancient types of land plants) that flourish even in rock crevices. ■ These plants propagate by producing spores—tiny fertilized cells that contain all the instructions for making a new plant—but the spore are unprotected by any outer coating and carry no supply of nutrient. ■ Vast numbers of them fall on the ground beneath the mother plants. ■ Sometimes they are carried farther afield by water or by wind. ■ But only those few spores that settle down in very favorable locations can start new life; the vast majority fall on barren ground. By force of sheer numbers, however, the mosses and ferns reached Hawaii, survived, and multiplied. Some species developed great size, becoming tree ferns that even now grow in the Hawaiian forests.

Many millions of years after ferns evolved (but long before the Hawaiian Islands were born from the sea), another kind of flora evolved on Earth: the seed-bearing plants. This was a wonderful biological invention. The seed has an outer coating that surrounds the genetic material of the new plant, and inside this covering is a concentrated supply of nutrients. Thus the seed's chances of survival are greatly enhanced over those of the naked spore. One type of seed-bearing plant, the angiosperm, includes all forms of blooming vegetation. In the angiosperm the seeds are wrapped in an additional layer of covering. Some of these coats are hard—like the shell of a nut—for extra protection. Some are soft and tempting, like a peach or a cherry. In some angiosperms the seeds are equipped with gossamer wings, like the dandelion and milkweed seeds. These new characteristics offered better ways for the seed to move to new habitats. They could travel through the air, float in water, and lie dormant for many months.

Plants with large, buoyant seeds—like coconuts—drift on ocean currents and are washed up on the shores. Remarkably resistant to the vicissitudes of ocean travel, they can survive prolonged immersion in saltwater when they come to rest on warm beaches and the conditions are favorable, the seed coats soften. Nourished by their imported supply of nutrients, the young plants push out their roots and establish their place in the sun.

By means of these seeds, plants spread more widely to new locations, even to isolated islands like the Hawaiian archipelago, which lies more than 2,000 miles west of California and 3,500 miles east of Japan. The seeds of grasses, flowers, and blooming trees made the long trips to these islands. (Grasses are simple forms of angiosperms that bear their encapsulated seeds on long stalks.) In a surprisingly short time, angiosperms filled many of the land areas on Hawaii that had been bare.

1. The phrase “at random” in the passage is closest in meaning to
  - (A) finally
  - (B) over a long period of time
  - (C) successfully
  - (D) without a definite pattern
2. It can be inferred from paragraph 2 that the fungi in lichens benefit from their symbiotic relationship with algae in what way?
  - (A) The algae help the fungi meet some of their energy needs.
  - (B) The algae protect the fungi from the Sun’s radiation.
  - (C) The algae provide the fungi with greater space for absorbing water.
  - (D) The fungi produce less waste in the presence of algae.
3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Some of the earliest important examples of symbiosis—the close cooperation of two or more living things—occur in island communities.
  - (B) Symbiosis—the close cooperation of pairs or small groups of living organisms—is especially important in these island environments.
  - (C) The first organisms on these islands worked together closely in a relationship known as symbiosis, which is particularly important on islands.
  - (D) It is significant to note that organisms in the beginning stages of the development of island life cannot survive without close cooperation.
4. The word “abundantly” in the passage is closest in meaning to
  - (A) occasionally
  - (B) plentifully
  - (C) usefully
  - (D) fortunately
5. The word “propagate” in the passage is closest in meaning to
  - (A) multiply
  - (B) emerge
  - (C) live
  - (D) evolve
6. According to paragraph 3, what was the relationship between lichens and ferns in the development of plant life on Hawaii?
  - (A) Ferns were able to grow because lichens created suitable soil.
  - (B) The decomposition of ferns produced minerals that were used by lichens.
  - (C) Lichens and ferns competed to grow in the same rocky environments.
  - (D) Lichens and ferns were typically found together in volcanic areas.
7. The word “This” in the passage refers to
  - (A) the spread of ferns and mosses in Hawaii
  - (B) the creation of the Hawaiian Islands
  - (C) the evolution of ferns
  - (D) the development of plants that produce seeds
8. According to paragraph 4, why do seeds have a greater chance of survival than spores do? To receive credit, you must select TWO answer choices.
  - (A) Seeds need less water to grow into a mature plant than spores do.
  - (B) Seeds do not need to rely on outside sources of nutrients.
  - (C) Seeds are better protected from environmental dangers than spores are.
  - (D) Seeds are heavier than spores and are therefore more likely to take root and grow.
9. Why does the author mention “a nut”, “a peach”, and “a cherry”?
  - (A) To indicate that some seeds are less likely to survive than others
  - (B) To point out that many angiosperms can be eaten

- (C) To provide examples of blooming plants
- (D) To illustrate the variety of coverings among angiosperm seeds

**10. The word “dormant” in the passage is closest in meaning to**

- (A) hidden
- (B) inactive
- (C) underground
- (D) preserved

**11. According to paragraph 5, a major reason that coconuts can establish themselves in distant locations is that their seeds can**

- (A) survive long exposure to heat on island beaches
- (B) float and survive for long periods in ocean water
- (C) use saltwater for maintenance and growth
- (D) maintain hard, protective coats even after growing roots

**12. According to the passage, which of the following characteristics do spores and seeds have in common?**

- (A) They may be surrounded by several layers of covering.
- (B) They are produced by flowering plants.
- (C) They may be spread by wind.
- (D) They are able to grow in barren soils.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

So since the chances of survival for any individual spore are small, the plants have to produce many spores in order to propagate.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

After the formation of the Hawaiian Islands, much time passed before conditions were suitable for plant life.

**Answer choices**

- (A) Algae are classified as symbiotic because they produce energy through the process of photosynthesis.
- (B) The first successful plants on Hawaii were probably lichens, which consist of algae and fungi living in a symbiotic relationship.
- (C) Lichens helped create favorable conditions for the growth of spore-producing plants such as ferns and mosses.
- (D) Seed-bearing plants evolved much later than spore-producing plants, but both types of plants had evolved well before the formation of the Hawaiian Islands.
- (E) Unlike spores, seeds must move to new habitats in order to have a strong chance of survival and growth.
- (F) Seed-bearing plants arrived and spread quickly in Hawaii, thanks to characteristics that increased their seeds' ability to survive and to move to different areas.

### 参考答案与解析

1. 选 **D**。at random 随机，所以 D 的 without definite pattern 无固定模式正确。
2. 选 **A**。以 lichen, fungus 和 algae 做关键词定位至第三句以后，说 algae 捕获太阳能并储存，而 fungi 从土壤中吸收矿物质，滋养 algae。问的是 fungi 如何受益，所以前半句是答案，A 正确。B 虽然提到 sun，但不是保护，注意不要错选；C 和 D 都没说。
3. 选 **C**。原文说岛上最早的生物是能 symbiosis 的，然后解释了 symbiosis。A 说最早的 symbiosis，原文说最早生物，所以 A 偷换概念，错；原文说生物能 symbiosis，然后才说 symbiosis 很重要，B 遗漏信息，错；D 完全改变了原文的结构，错。
4. 选 **B**。abundantly 充足地，充分地，所以 B 的 plentifully 正确。
5. 选 **A**。propagate 繁殖，推广，multiply 正确。
6. 选 **A**。以 lichen 和 fern 做关键词定位至前两句，说 lichen 分解了岩石，准备了富含矿物质的土壤，接着其他的植物就来了，然后就出现了 fern，所以 lichen 对 fern 的作用是提供适合生长的土壤，A 正确。B 错，原文说 decomposition 的不是 fern，是岩石；C 和 D 都没说。
7. 选 **D**。this 指代之前的整个句子，就近原则看后半句，说另外一个 flora 在地球上进化出来，冒号之后就是那个 flora，所以后面的那个 this 应该指的是这个 flora 的进化，答案 D。
8. 选 **BC**。以 chance of survival 做关键词定位至第四句，一开始就出现 thus，而且问题问的是原因，所以往前看，前文说了两个原因，第一个是有 outer coating，第二个是有 concentrated supply of nutrient，所以答案分别是 B 和 C，其他两个答案没说。
9. 选 **D**。修辞目的题，这几个词所在的句子本身就是个例子，所以往前看，前一句说 angiosperm 的种子外面有一层种皮，紧接着就说有的外皮是硬的，比如 blabla，有的外皮是软的，比如 blabla，也就是为了说外皮可以分为不同类别才举的例子，所以 D 正确，其他的都没说。
10. 选 **B**。dormant 休眠的，所以 inactive 正确。
11. 选 **B**。以 coconut 做关键词定位至第一句，但这句话明显与问题无关，只能往下看，而且 distant location 与原文第二句的 ocean travel 同义重合。说它们能够生活在长期的 immersion 下，正确答案 B，注意 C 虽然提到了 saltwater，但 maintenance 和 growth 都没说。
12. 选 **C**。考全文的题，关注各段的首末句。第二段的第一句说 spore 能够被风吹走，第四段的最后一句说 seed 能够在空气中散播，所以两者的共同点是 C。A 和 B 是只有 seed 才有的，spore 没有；D 是只有 spore 才有的，seed 没有。
13. 选 **B**。两个过渡点，many spores 和连词 so，many spores 确定 A 或者 B，注意 D 因为 few spore 所以与待插入句无重合点，错；A 之后有 these plants 与上文过渡紧密，排除，所以 B 正确，而且 B 之后的 vast number of them 刚好与待插入句中的 many spores 对上。
14. 选 **BCF**。A 选项的因果关系原文没说，即使说了也是个细节，不选；B 选项对应第二段从第三句一直到最后的部分，正确；C 选项对应原文第三段前两句，正确；D 选项对应原文第四段首句，但这段的首句并不是这段的中心，所以这个选项是个细节，不选；E 选项原文没说，不选；F 选项对应原文第四段最后一句和第五段第一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时：      分      秒

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**Colonizing the Americas via the Northwest Coast**

It has long been accepted that the Americas were colonized by a migration of peoples from Asia, slowly traveling across a land bridge called Beringia (now the Bering Strait between northeastern Asia and Alaska) during the last Ice Age. ■ The first water craft theory about this migration was that around 11,000–12,000 years ago there was an ice-free corridor stretching from eastern Beringia to the areas of North America south of the great northern glaciers. It was this midcontinental corridor between two massive ice sheets—the Laurentide to the east and the Cordilleran to the west—that enabled the southward migration. ■ But belief in this ice-free corridor began to crumble when paleoecologist Glen MacDonald demonstrated that some of the most important radiocarbon dates used to support the existence of an ice-free corridor were incorrect. ■ He persuasively argued that such an ice-free corridor did not exist until much later, when the continental ice began its final retreat. ■

Support is growing for the alternative theory that people using watercraft, possibly skin boats, moved southward from Beringia along the Gulf of Alaska and then southward along the Northwest coast of North America possibly as early as 16,000 years ago. This route would have enabled humans to enter southern areas of the Americas prior to the melting of the continental glaciers. Until the early 1970s, most archaeologists did not consider the coast a possible migration route into the Americas because geologists originally believed that during the last Ice Age the entire Northwest Coast was covered by glacial ice. It had been assumed that the ice extended westward from the Alaskan/Canadian mountains to the very edge of the continental shelf, the flat, submerged part of the continent that extends into the ocean. This would have created a barrier of ice extending from the Alaska Peninsula, through the Gulf of Alaska and southward along the Northwest Coast of north America to what is today the state of Washington.

The most influential proponent of the coastal migration route has been Canadian archaeologist Knut Fladmark. He theorized that with the use of watercraft, people gradually colonized unglaciated refuges and areas along the continental shelf exposed by the lower sea level. **Fladmark's hypothesis received additional support from the fact that the greatest diversity in native American languages occurs along the west coast of the Americas, suggesting that this region has been settled the longest.**

More recent geologic studies documented deglaciation and the existence of ice-free areas throughout major coastal areas of British Columbia, Canada, by 13,000 years ago. Research now indicates that sizable areas of southeastern Alaska along the inner continental shelf were not covered by ice toward the end of the last Ice Age. One study suggests that except for a 250-mile coastal area between southwestern British Columbia and Washington State, the Northwest Coast of North America was largely free of ice by approximately 16,000 years ago. Vast areas along the coast may have been deglaciated beginning around 16,000 years ago, possibly providing a coastal corridor for the movement of plants, animals, and humans sometime between 13,000 and 14,000 years ago.

The coastal hypothesis has gained increasing support in recent years because the remains of large land animals, such as caribou and brown bears, have been found in southeastern Alaska dating between 10,000 and 12,500 years ago. This is the time period in which most scientists formerly believed the area to be inhospitable for humans. It has been suggested that if the environment were capable of supporting breeding populations of bears, there would have been enough food resources to support humans. Fladmark and other believe that the first human colonization of America occurred by boat along the Northwest Coast during the very late Ice Age, possibly as early as 14,000 years ago. The most recent geologic evidence indicates that it may have been possible for people to colonize ice-free regions along the continental shelf that were still exposed by the lower sea level between 13,000 and 14,000 years ago.

The coastal hypothesis suggests an economy based on marine mammal hunting, saltwater fishing, shellfish gathering, and the use of watercraft. Because of the barrier of ice to the east, the Pacific Ocean to the west, and populated areas to the north, there may have been a greater impetus for people to move in a southerly direction.

1. **According to paragraph 1, the theory that people first migrated to the Americans by way of an ice-free corridor was seriously called into question by**
  - (A) paleoecologist Glen MacDonald's argument that the original migration occurred much later than had previously been believed
  - (B) the demonstration that certain previously accepted radiocarbon dates were incorrect
  - (C) evidence that the continental ice began its final retreat much later than had previously been believed
  - (D) research showing that the ice-free corridor was not as long lasting as had been widely assumed
2. **The word "persuasively" in the passage is closest in meaning to**
  - (A) aggressively
  - (B) inflexibly
  - (C) convincingly
  - (D) carefully
3. **Paragraph 2 begins by presenting a theory and then goes on to**
  - (A) discuss why the theory was rapidly accepted but then rejected
  - (B) present the evidence on which the theory was based
  - (C) cite evidence that now shows that the theory is incorrect
  - (D) explain why the theory was not initially considered plausible
4. **The phrase "prior to" is closest in meaning to**
  - (A) before
  - (B) immediately after
  - (C) during
  - (D) in spite of
5. **Paragraph 2 supports the idea that, before the 1970s, most archaeologists held which of the following views about the earliest people to reach the Americas?**
  - (A) They could not have sailed directly from Beringia to Alaska and then southward because, it was thought, glacial ice covered the entire coastal region.
  - (B) They were not aware that the climate would continue to become milder.
  - (C) They would have had no interest in migrating southward from Beringia until after the continental glaciers had begun to melt.
  - (D) They lacked the navigational skills and appropriate boats needed long-distance trips.
6. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Because this region has been settled the longest, it also displays the greatest diversity in Native American languages.
  - (B) Fladmark's hypothesis states that the west coast of the Americas has been settled longer than any other region.
  - (C) The fact that the greatest diversity of Native American languages occurs along the west coast of the Americas lends strength to Fladmark's hypothesis.
  - (D) According to Fladmark, Native American languages have survived the longest along the west coast of the Americas.
7. **The author's purpose in paragraph 4 is to**
  - (A) indicate that a number of recent geologic studies seem to provide support for the coastal hypothesis
  - (B) indicate that coastal and inland migrations may have happened simultaneously
  - (C) explain why humans may have reached America's northwest coast before animals and plants did
  - (D) show that the coastal hypothesis may explain how people first reached Alaska but it cannot explain how people reached areas like modern British Columbia and Washington State
8. **The word "Vast" in the passage is closest in meaning to**
  - (A) Frozen
  - (B) Various
  - (C) Isolated
  - (D) Huge

9. According to paragraph 5, the discovery of the remains of large land animals supports the coastal hypothesis by providing evidence that
- (A) humans were changing their hunting techniques to adapt to coastal rather than inland environments
  - (B) animals had migrated from the inland to the coasts, an indication that a midcontinental ice-free corridor was actually implausible
  - (C) humans probably would have been able to find enough resources along the coastal corridor
  - (D) the continental shelf was still exposed by lower sea levels during the period when the southward migration of people began
10. The word “inhospitable” in the passage is closest in meaning to
- (A) not familiar
  - (B) not suitable
  - (C) not dangerous
  - (D) not reachable
11. According to paragraph 5, the most recent geologic research provides support for a first colonization of America dating as far back as
- (A) 16,000 years ago
  - (B) 14,000 years ago
  - (C) 12,500 years ago
  - (D) 10,000 years ago
12. The word “impetus” in the passage is closest in meaning to
- (A) chance
  - (B) protection
  - (C) possibility
  - (D) incentive

13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Moreover, other evidence suggests that even if an ice-free corridor did exist, it would have lacked the resources needed for human colonization.

Where would the sentence best fit?

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

Recent evidence favors a rival to the long-standing theory that the Americas were colonized 11,000–12,000 years ago by people migrating south from Beringia along a midcontinental ice-free corridor.

**Answer choices**

- (A) Evidence that an ice-free corridor between two ice sheets developed when the continental ice first began to melt came primarily from radiocarbon dating.
- (B) There is growing support for the theory that migration took place much earlier, by sea, following a coastal route along Alaska and down the northwest coast.
- (C) Recent geologic evidence indicates that contrary to what had been believed, substantial areas along the coast were free of ice as early as 16,000 years ago.
- (D) Research now indicates that the parts of the inner continental shelf that remained covered with ice were colonized by a variety of early human groups well adapted to living in extremely cold environments.
- (E) There is evidence suggesting that areas along the coast may have contained enough food resources between 13,000 and 14,000 years ago to have made human colonization possible.
- (F) Even though the northern part of the continent allowed for a more varied economy, several early human groups quickly moved south.

### 参考答案与解析

1. 选 **B**。以 ice-free corridor 做关键词定位至第二句和第四句，第二句只是单纯说这个理论是什么，问题问 called into question 遭到质疑为什么，所以答案应该在第四句，这个理论 crumble 是因为 GM 先生发现 radiocarbon dates 是错的。
2. 选 **C**。persuasively 有说服力的，令人信服的，所以 C 的 convincingly 正确。
3. 选 **D**。问题问先提出理论接着怎么了，所以看第二句。说这个路线能让人们在冰川融化之前进入美洲南部，所以这个支持本段第一句内容的，而且后一句说直到 70 年代，人们才认同 coast 路线，也就是这个理论可能是对的。A 和 C 都不对；原文没说前面的理论是基于这个事实的，B 错。
4. 选 **A**。prior to 在……之前，想到 priority 优先，A 对。**努力背单词吧，词汇题就是认单词。**
5. 选 **A**。以 1970s 做关键词定位至第三句，70 年代之前，人们都认为水路不可能，因为冰川覆盖了海面，所以 A 正确。BCD 都没说。
6. 选 **C**。原句的结构是 Fladmark 的 hypothesis 得到了 fact 的支持。C 说 fact lend strength to 他的 hypothesis，所以正确。A 的因果关系原文没有；原文说事实支持了 hypothesis，B 和 D 都说 Fladmark 说这个，偷换概念，都不对。
7. 选 **A**。问整段的目的，所以看第一句。研究表明那时候加拿大海岸没有冰，所以是支持由海路到达美洲的 hypothesis，A 或者 D 可能对，但 D 后半句的 but 没说，所以 A 正确。不放心的话往后再看看，第二句又是一个 research indicate blabla，所以 A 的 a number of studies 正确。
8. 选 **D**。vast 巨大的，所以 D 的 huge 正确。
9. 选 **C**。以 remains of large land animal 做关键词定位至第一句，但这句明显只是问题的重复，所以往后看，下一句说 inhospitable，再下一句说如果熊有吃的人也有，所以 C 正确，其他都没说。
10. 选 **B**。inhospitable 不适居住的，B 正确。
11. 选 **B**。以 first colonization of America 做关键词定位至最后一句，B 正确。
12. 选 **D**。impetus 推动力，所以 D 的 incentive 正确。
13. 选 **D**。四个过渡点，分别是 moreover, other evidence, even if 和 exist，注意 ice-free corridor 由于反复出现，不能作为过渡点。通过 moreover 和 other evidence 排除 A，因为 first 还没说不能说 other；even if 表让步，说明待插入句之前必须与待插入句意思上相反，只有 D 点前有不存在，与待插入句的 exist 相反，所以 D 对。C 之后的 he 与前文过渡紧密；B 的 but 与之前过渡紧密。
14. 选 **BCE**。A 选项是第一段的一个细节，不选；B 选项对应原文第二段第一句，正确；C 选项对应原文第四段最后一句，正确；D 选项原文没说，不选；E 选项对应原文第五段的后两句，正确；F 选项与第六段说的相反，北面已经住了很多人，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Reflection in Teaching**

Teachers, it is thought, benefit from the practice of reflection, the conscious act of thinking deeply about and carefully examining the interactions and events within their own classrooms. Educators T. Wildman and J. Niles (1987) describe a scheme for developing reflective practice in experienced teachers. This was justified by the view that reflective practice could help teachers to feel more intellectually involved in their role and work in teaching and enable them to cope with the paucity of scientific fact and the uncertainty of knowledge in the discipline of teaching.

Wildman and Niles were particularly interested in investigating the conditions under which reflection might flourish—a subject on which there is little guidance in the literature. They designed an experimental strategy for a group of teachers in Virginia and worked with 40 practicing teachers over several years. They were concerned that many would be “drawn to these new, refreshing” conceptions of teaching only to find that the void between the abstractions and the realities of teacher reflection is too great to bridge. Reflection on a complex task such as teaching is not easy.” The teachers were taken through a program of talking about teaching events, moving on to reflecting about specific issues in a supported, and later an independent, manner.

Wildman and Niles observed that systematic reflection on teaching required a sound ability to understand classroom events in an objective manner. They describe the initial understanding in the teachers with whom they were working as being “utilitarian...and not rich or detailed enough to drive systematic reflection.” Teachers rarely have the time or opportunities to view their own or the teaching of others in an objective manner. Further observation revealed the tendency of teachers to evaluate events rather than review the contributory factors in a considered manner by, in effect, standing outside the situation.

Helping this group of teachers to revise their thinking about classroom events became central. ■ This process took time and patience and effective trainers. ■ The researchers estimate that the initial training of the teachers to view events objectively took between 20 and 30 hours, with the same number of hours again being required to practice the skills of reflection.

■ Wildman and Niles identify three principles that facilitate reflective practice in a teaching situation. ■ The first is support from administrators in an education system, enabling teachers to understand the requirements of reflective practice and how it relates to teaching students. The second is the availability of sufficient time and space. The teachers in the program described how they found it difficult to put aside the immediate demands of others in order to give themselves the time they needed to develop their reflective skills. The third is the development of a collaborative environment with support from other teachers. Support and encouragement were also required to help teachers in the program cope with aspects of their professional life with which they were not comfortable. Wildman and Niles make a summary comment: “Perhaps the most important thing we learned is the idea of the teacher-as-reflective-practitioner will not happen simply because it is a good or even compelling idea.”

The work of Wildman and Niles suggests the importance of recognizing some of the difficulties of instituting reflective practice. Others have noted this, making a similar point about the teaching profession’s cultural inhibitions about reflective practice. Zeichner and Liston (1987) point out the inconsistency between the role of the teacher as a (reflective) professional decision maker and the more usual role of the teacher as a technician, putting into practice the ideas of theirs. More basic than the cultural issues is the matter of motivation. Becoming a reflective practitioner requires extra work (Jaworski, 1993) and has only vaguely defined goals with, perhaps, little initially perceivable reward and the threat of vulnerability. Few have directly questioned what might lead a teacher to want to become reflective. Apparently, the most obvious reason for teachers to work toward reflective practice is that teacher educators think it is a good thing. **There appear to be many unexplored matters about the motivation to reflect—for example, the value of externally motivated reflection as opposed to that of teachers who might reflect by habit.**

1. The word “justified” in the passage is closest in meaning to
  - (A) supported
  - (B) shaped
  - (C) stimulated
  - (D) suggested
2. According to paragraph 1, it was believed that reflection could help teachers
  - (A) understand intellectual principles of teaching
  - (B) strengthen their intellectual connection to their work
  - (C) use scientific fact to improve discipline and teaching
  - (D) adopt a more disciplined approach to teaching
3. The word “flourish” in the passage is closest in meaning to
  - (A) continue
  - (B) occur
  - (C) succeed
  - (D) apply
4. All of the following are mentioned about the experimental strategy described in paragraph 2 EXCEPT
  - (A) It was designed so that teachers would eventually reflect without help from others.
  - (B) It was used by a group of teachers over a period of years.
  - (C) It involved having teachers take part in discussions of classroom events.
  - (D) It involved having teachers record in writing their reflections about teaching.
5. According to paragraph 2, Wildman and Niles worried that the teachers they were working with might feel that
  - (A) the number of teachers involved in their program was too large
  - (B) the concepts of teacher reflection were so abstract that they could not be applied
  - (C) the ideas involved in reflection were actually not new and refreshing
  - (D) several years would be needed to acquire the habit of reflecting on their teaching
6. The word “objective” in the passage is closest in meaning to
  - (A) unbiased
  - (B) positive
  - (C) systematic
  - (D) thorough
7. According to paragraph 3, what did the teachers working with Wildman and Niles often fail to do when they attempted to practice reflection?
  - (A) Correctly calculate the amount of time needed for reflection.
  - (B) Provide sufficiently detailed descriptions of the methods they used to help them reflect.
  - (C) Examine thoughtfully the possible causes of events in their classrooms.
  - (D) Establish realistic goals for themselves in practicing reflection.
8. How is paragraph 4 related to other aspects of the discussion of reflection in the passage?
  - (A) It describes and comments on steps taken to overcome problems identified earlier in the passage.
  - (B) It challenges the earlier claim that teachers rarely have the time to think about their own or others’ teaching.
  - (C) It identifies advantages gained by teachers who followed the training program described earlier in the passage.
  - (D) It explains the process used to define the principles discussed later in the passage.
9. The word “compelling” in the passage is closest in meaning to
  - (A) commonly held
  - (B) persuasive
  - (C) original
  - (D) practical
10. According to paragraph 6, teachers may be discouraged from reflecting because
  - (A) it is not generally supported by teacher educators

- (B) the benefits of reflection may not be apparent immediately
- (C) it is impossible to teach and reflect on one's teaching at the same time
- (D) they have often failed in their attempts to become reflective practitioners

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) The practice of being reflective is no longer simply a habit among teachers but something that is externally motivated.
- (B) Most teachers need to explore ways to form the habit of reflection even when no external motivation exists.
- (C) Many aspects of the motivation to reflect have not been studied, including the comparative benefits of externally motivated and habitual reflection among teachers.
- (D) There has not been enough exploration of why teachers practice reflection as a habit with or without external motivation.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

However, changing teachers' thinking about reflection will not succeed unless there is support for reflection in the teaching environment.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Wildman and Niles have conducted research on reflection in teaching.

**Answer choices**

- (A) Through their work with Virginia teachers, Wildman and Niles proved conclusively that reflection, though difficult, benefits both teachers and students.
- (B) Wildman and Niles found that considerable training and practice are required to understand classroom events and develop the skills involved in reflection.
- (C) Wildman and Niles identified three principles that teachers can use to help themselves cope with problems that may arise as a result of reflection.
- (D) Wildman and Niles concluded that teachers need sufficient resources as well as the cooperation and encouragement of others to practice reflection.
- (E) There are numerous obstacles to implementing reflection in schools and insufficient understanding of why teachers might want to reflect.
- (F) Whether teachers can overcome the difficulties involved in reflection may depend on the nature and intensity of their motivation to reflect.

### 参考答案与解析

1. 选 **A**。justify 意思是证明……正当，支持，想到 just 有正义之意，所以 A 的 support 正确。
2. 选 **B**。以 help teachers 定位至最后一句，帮助老师们智力上更多参与教学，所以答案是 B。
3. 选 **C**。flourish 繁盛，繁荣，C 的 succeed 正确。
4. 选 **D**。EXCEPT 题，排除法。A 的 without help 与第一句的 little guidance 同义重合，正确，不选；B 的 a period of years 做关键词定位至原文第二句，正确，不选；C 的 discussion 与原文最后一句的 talk 同义重合，正确，不选；D 的 writing 原文没说，错，选。
5. 选 **B**。以 worried 定位至第三句的 concern，说他们担心老师们觉得 teaching 的理论与现实之间的鸿沟难以逾越，所以 B 正确，其他都没提到。
6. 选 **A**。objective 客观的，选 A，没有偏见的。
7. 选 **C**。此题较难，题干中缺少关键词，排除法。A 的 time 做关键词定位至第三句，原文说没有时间做，选项说计算时间，完全不是一回事，错；B 的 detailed descriptions 做关键词定位至第二句，原文说老师们对 reflection 的理解不够细致，答案说对方法的描述不够细致，不是一回事，不选；C 的 cause 与原文最后一句中的 contributory factors 同义重合，原文说 evaluate rather than review，也就是没 review 原因，与 C 的 examine 原因是同义替换，正确；D 没提及。
8. 选 **A**。问整段的题看第一句，说帮助这些老师改变他们对课堂事件的想法是非常重要的，前一段说了很多老师们面对课堂事件时产生的问题，所以这段提出的是解决方法，所以答案是 A。本段与前一段之间不是矛盾关系，所以 B 的 challenge 不对；本段只是在陈述事实，没说 follow 的老师有什么好处，所以 C 的 advantages 不对；从本段的内容看不出与下段有什么联系，所以 D 错。
9. 选 **B**。compelling 引人注目的，令人信服的，所以 persuasive 有说服力的正确。
10. 选 **B**。此题较难，题干中缺少关键词，排除法。A 的 educators 做关键词定位至倒数第二句，原文说 educator 认为是好事，选项说不支持，说反了，错；B 没有明显关键词，但倒数第四句说 reflective practitioner 需要额外工作，目标不清，最初少有回报，就是 B 项说的最初不会看到好处，对；C 和 D 都没提及，不选。
11. 选 **C**。原文破折号后的是一个例子，主干部分是关于 motivation 有很多未知问题。A 改变了原文主干，错；B 将例子和主干混到一起，改变了原文结构，错；C 正确；D 具有一定迷惑性，原文破折号后面只是诸多未知问题其中的一个，D 没提到主干的诸多未知问题，错。
12. 选 **C**。两个过渡点，however 和 teaching environment，teaching environment 与第五段的 teaching situation 重合，确定 C 或者 D。D 之后说 first，之前说三个 principal，所以过渡紧密，排除，正确答案 C。第四段说改变 thinking 需要时间和人力，however 一个转折，开始说 teaching situation 的变化对改变 thinking 的作用，所以 however 在这里刚好对上。
13. 选 **BDE**。A 选项错，原文只是说 reflection 对老师有好处，跟学生无关，不选；B 选项对应原文第四段的前两句，正确；C 选项具有一定迷惑性，原文说的是 facilitate，没说解决问题，所以这个选项错，不选；D 选项对应原文第五段的三个 principal，正确；E 选项对应原文第六段第一句，正确；F 选项原文没说，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Chinese Pottery

China has one of the world's oldest continuous civilizations—despite invasions and occasional foreign rule. A country as vast as China with so long-lasting a civilization has a complex social and visual history, within which pottery and porcelain play a major role.

The function and status of ceramics in China varied from dynasty to dynasty, so they may be utilitarian, burial, trade-collectors, or even ritual objects, according to their quality and the era in which they were made. The ceramics fall into three broad types—earthenware, stoneware, and porcelain—for vessels, architectural items such as roof tiles, and modeled objects and figures. In addition, there was an important group of sculptures made for religious use, the majority of which were produced in earthenware.

The earliest ceramics were fired to earthenware temperatures, but as early as the fifteenth century B.C., high-temperature stonewares were being made with glazed surfaces. During the Six Dynasties period (AD 265–589), kilns in north China were producing high-fired ceramics of good quality. Whitewares produced in Hebei and Henan provinces from the seventh to the tenth centuries evolved into the highly prized porcelains of the Song dynasty (AD. 960–1279), long regarded as one of the high points in the history of China's ceramic industry.

**The tradition of religious sculpture extends over most historical periods but is less clearly delineated than that of stonewares or porcelains, for it embraces the old custom of earthenware burial ceramics with later religious images and architectural ornament.** Ceramic products also include lead-glazed tomb models of the Han dynasty, three-color lead-glazed vessels and figures of the Tang dynasty, and Ming three-color temple ornaments, in which the motifs were outlined in a raised trail of slip—as well as the many burial ceramics produced in imitation of vessels made in materials of higher intrinsic value.

Trade between the West and the settled and prosperous Chinese dynasties introduced new forms and different technologies. One of the most far-reaching examples is the impact of the fine ninth-century AD. Chinese porcelain wares imported into the Arab world. ■ So admired were these pieces that they encouraged the development of earthenware made in imitation of porcelain and instigated research into the method of their manufacture. ■ From the Middle East the Chinese acquired a blue pigment—a purified form of cobalt oxide unobtainable at that time in China—that contained only a low level of manganese. Cobalt ores found in China have a high manganese content, which produces a more muted blue-gray color. ■ In the seventeenth century, the trading activities of the Dutch East India Company resulted in vast quantities of decorated Chinese porcelain being brought to Europe, which stimulated and influenced the work of a wide variety of wares, notably Delft. ■ The Chinese themselves adapted many specific vessel forms from the West, such as bottles with long spouts, and designed a range of decorative patterns especially for the European market.

Just as painted designs on Greek pots may seem today to be purely decorative, whereas in fact they were carefully and precisely worked out so that at the time, their meaning was clear, so it is with Chinese pots. To twentieth-century eyes, Chinese pottery may appear merely decorative, yet to the Chinese the form of each object and its adornment had meaning and significance. The dragon represented the emperor, and the phoenix, the empress; the pomegranate indicated fertility, and a pair of fish, happiness; mandarin ducks stood for wedded bliss; the pine tree, peach, and crane are emblems of long life; and fish leaping from waves indicated success in the civil service examinations. Only when European decorative themes were introduced did these meanings become obscured or even lost.

From early times pots were used in both religious and secular contexts. The imperial court commissioned work and in the Yuan dynasty (A.D. 1279–1368) an imperial ceramic factory was established at Jingdezhen. Pots played an important part in some religious ceremonies. Long and often lyrical descriptions of the different types of ware exist that assist in classifying pots, although these sometimes confuse an already large and complicated picture.

1. The word **"status"** in the passage is closest in meaning to
  - (A) origin
  - (B) importance
  - (C) quality
  - (D) design
2. According to paragraph 2, which of the following is true of Chinese ceramics?
  - (A) The function of ceramics remained the same from dynasty to dynasty.
  - (B) The use of ceramics as trade objects is better documented than the use of ceramics as ritual objects.
  - (C) There was little variation in quality for any type of ceramics over time.
  - (D) Some religious sculptures were made using the earthenware type of ceramics.
3. The word **"evolve"** in the passage is closest in meaning to
  - (A) divided
  - (B) extended
  - (C) developed
  - (D) vanished
4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) While stonewares and porcelains are found throughout most historical periods, religious sculpture is limited to the ancient period.
  - (B) Religious sculpture was created in most periods, but its history is less clear than that of stonewares or porcelains because some old forms continued to be used even when new ones were developed.
  - (C) While stonewares and porcelains changed throughout history, religious sculpture remained uniform in form and use.
  - (D) The historical development of religious sculpture is relatively unclear because religious sculptures sometimes resemble earthenware architectural ornaments.
5. Paragraph 3 supports all of the following concerning the history of the ceramic industry in China EXCEPT
  - (A) The earliest high-fired ceramics were of poor quality.
  - (B) Ceramics produced during the Tang and Ming dynasties sometimes incorporated multiple colors.
  - (C) Earthenware ceramics were produced in China before stonewares were.
  - (D) The Song dynasty period was notable for the production of high quality porcelain ceramics.
6. The word **"instigate"** in the passage is closest in meaning to
  - (A) improved
  - (B) investigated
  - (C) narrowed
  - (D) caused
7. According to paragraph 4, one consequence of the trade of Chinese ceramics was
  - (A) the transfer of a distinctive blue pigment from China to the Middle East
  - (B) an immediate change from earthenware production to porcelain production in European countries
  - (C) Chinese production of wares made for the European market
  - (D) a decreased number of porcelain vessels available on the European market
8. The word **"whereas"** in the passage is closest in meaning to
  - (A) while
  - (B) previously
  - (C) surprisingly
  - (D) because
9. In paragraph 5, the author compares the designs on Chinese pots to those on Greek pots in order to
  - (A) emphasize that while Chinese pots were decorative, Greek pots were functional
  - (B) argue that the designs on Chinese pots had specific meanings and were not just decorative
  - (C) argue that twentieth-century scholars are better able to understand these designs than were ancient scholars

(D) explain how scholars have identified the meaning of specific images on Chinese pots

**10. Which of the following is mentioned in paragraph 5 as being symbolically represented on Chinese ceramics?**

- (A) Chinese rulers
- (B) love of homeland
- (C) loyalty to friends
- (D) success in trade

**11. Paragraph 5 suggests which of the following about the decorations on Chinese pottery?**

- (A) They had more importance for aristocrats than for ordinary citizens.
- (B) Their significance may have remained clear had the Chinese not come under foreign influence.
- (C) They contain some of the same images that appear on Greek pots.
- (D) Their significance is now as clear to twentieth century observers as it was to the early Chinese.

**12. The word “these” in the passage refers to**

- (A) religious ceremonies
- (B) descriptions
- (C) types of ware
- (D) pots

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Foreign trade was also responsible for certain innovations in coloring.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Ceramics have been produced in China for a very long time.

**Answer choices**

- (A) The Chinese produced earthenware, stoneware, and porcelain pottery and they used their ceramics for a variety of utilitarian, architectural, and ceremonial purposes.
- (B) The shape and decoration of ceramics produced for religious use in China were influenced by Chinese ceramics produced for export.
- (C) As a result of trade relations, Chinese ceramic production changed and Chinese influenced the ceramics production of other countries.
- (D) Chinese burial ceramics have the longest and most varied history of production and were frequently decorated with written texts that help scholars date them.
- (E) Before China had contact with the West, the meaning of various designs used to decorate Chinese ceramics was well understood.
- (F) Ceramics made in imperial factories were used in both religious and non-religious contexts.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。status 状态，地位，所以 B 的 importance 重要性，地位正确。
2. 选 **D**。排除法，A 的 dynasty to dynasty 做关键词定位至第一句，说反，错；B 的 trade objects 和 ritual objects 做关键词定位至第一句，原文没有比较，错；C 的 quality 做关键词定位至第一句，说根据它们质量决定用来干嘛，所以质量是有变化的，C 错；D 的 religious 和 earthenware 做关键词定位至最后一句，正确。
3. 选 **C**。evolve 进化，所以 C 的 develop 正确。
4. 选 **B**。原文的主要关系是因果，因果的结果部分包含了一个转折，所以从结构上说只有 B 和 D 可能正确。B 正确，D 错在原文说 stoneware 和 porcelain 比 religious sculpture 清楚，但没说 religious sculpture 不清楚，错。
5. 选 **A**。EXCEPT 题。A 的 high-fired ceramics 做关键词定位至第二句，原文说 good quality，备选项说 poor，反了，错，选；B 的 Tang and Ming Dynasty 做关键词定位至最后一句，正确，不选；C 的 earthenware 和 stoneware 做关键词定位至第一句，原文说最早的是 earthenware，所以比 stoneware 早，所以 C 正确，不选；D 的 Song dynasty 做关键词定位至第三句，正确，不选。
6. 选 **D**。instigate 教唆，鼓动，煽动，所以 cause 引起正确，注意不要被 investigate 迷惑。
7. 选 **C**。以 trade of Chinese ceramics 做关键词定位至倒数第二句，问结果，所以应该关注 result in 之后的内容，说大量的 Chinese porcelain 到了欧洲，影响了一系列 ware，接着又说会专门为欧洲市场做一些 ware，所以 C 正确；注意 B 尽管说到了 change，但 immediate 是原文没说的；A 没说；D 说反了，应该是增加。
8. 选 **A**。注意句子中的 seem 和 in fact, seem 叫做看上去，也就是事实很可能不是这样，后面的 in fact 叫做事实上，也就是说前面说的很可能不是事实，两者呼应，都说明两句话之间的关系是转折，所以 while 正确。
9. 选 **B**。先看本句，现代人认为希腊的 pots 上的 design 只是装饰，没有实际意义，但事实上是有意义的，中国的 pots 也这样，所以 B 正确。A 错，不是 pots decorative，而是 design；C 说反，D 没说方式，所以 how 错。
10. 选 **A**。问下面哪个是 design 的替代意义，倒数第二句整个都在说 pots 上 design 的意义，提到了 emperor 和 empress，皇帝和皇后，所以 A 的 Chinese rulers 正确，统治者；其他都没说。
11. 选 **B**。问题中关键词不明显，排除法。A 的 ordinary citizens 和 aristocrat 原文没说；B 的 foreign influence 做关键词定位至最后一句的 European，说直到引入欧洲 theme 之后中国原有的装饰的意思才被 obscure，对应 B，没有 foreign influence 那些意思不会改变，正确；C 没说；D 反了，应该是 ancient 更熟悉。
12. 选 **B**。these 往前找，找主语。注意从句子一开始到 exist 之前都是句子的主语，但 of 之前的东西是整个句子的核心，所以答案是 description，对于什么什么的描述，描述才是核心，不是 types of ware。
13. 选 **B**。两个过渡点，foreign trade 和 coloring。foreign trade 对应原文第四句的 from Middle East Chinese acquired blabla 和倒数第二句的 trading activities，所以 BCD 都有可能；coloring 证明 B 或者 C 正确。按照正常逻辑，应该先总结，说外贸也使染色技术发生变化，接着再说怎么变的，所以 B 正确，C 错误。
14. 选 **ACE**。A 选项对应第二段第二句，正确；B 选项原文没说，不选；C 选项对应原文第四段第一句，正确；D 选项原文没说，不选；E 选项对应原文第五段最后一句，正确；F 选项对应原文最后一段，但最后一段没说 imperial 陶瓷是用于 both 情况的，也不选。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Variations in the Climate**

One of the most difficult aspects of deciding whether current climatic events reveal evidence of the impact of human activities is that it is hard to get a measure of what constitutes the natural variability of the climate. We know that over the past millennia the climate has undergone major changes without any significant human intervention. We also know that the global climate system is immensely complicated and that everything is in some way connected, and so the system is capable of fluctuating in unexpected ways. We need therefore to know how much the climate can vary of its own accord in order to interpret with confidence the extent to which recent changes are natural as opposed to being the result of human activities.

Instrumental records do not go back far enough to provide us with reliable measurements of global climatic variability on timescales longer than a century. What we do know is that as we include longer time intervals, the record shows increasing evidence of slow swings in climate between different regimes. To build up a better picture of fluctuations appreciably further back in time requires us to use proxy records.

**Over long periods of time, substances whose physical and chemical properties change with the ambient climate at the time can be deposited in a systematic way to provide a continuous record of changes in those properties overtime, sometimes for hundreds or thousands of years.** Generally, the layering occurs on an annual basis, hence the observed changes in the records can be dated. Information on temperature, rainfall, and other aspects of the climate that can be inferred from the systematic changes in properties is usually referred to as proxy data. Proxy temperature records have been reconstructed from ice core drilled out of the central Greenland ice cap, calcite shells embedded in layered lake sediments in Western Europe, ocean floor sediment cores from the tropical Atlantic Ocean, ice cores from Peruvian glaciers, and ice cores from eastern Antarctica. While these records provide broadly consistent indications that temperature variations can occur on a global scale, there are nonetheless some intriguing differences, which suggest that the pattern of temperature variations in regional climates can also differ significantly from each other.

What the proxy records make abundantly clear is that there have been significant natural changes in the climate over timescales longer than a few thousand years. Equally **striking**, however, is the relative stability of the climate in the past 10,000 years (the Holocene period).

To the extent that the coverage of the global climate from these records can provide a measure of its true variability, it should at least indicate how all the natural causes of climate change have combined. These include the chaotic fluctuations of the atmosphere, the slower but equally **erratic** behavior of the oceans, changes in the land surfaces, and the extent of ice and snow. Also included will be any variations that have arisen from volcanic activity, solar activity, and, possibly, human activities.

One way to estimate how all the various processes leading to climate variability will combine is by using computer models of the global climate. They can do only so much to represent the full complexity of the global climate and hence may give only limited information about natural variability. Studies suggest that to date the variability in computer simulations is considerably smaller than in data obtained from the proxy records.

In addition to the internal variability of the global climate system itself, there is the added factor of external influences, such as volcanoes and solar activity. ■ There is a growing body of opinion that both these physical variations have a measurable impact on the climate. ■ Thus we need to be able to include these in our **deliberations**. ■ Some current analyses conclude that volcanoes and solar activity explain quite a considerable amount of the observed variability in the period from the seventeenth to the early twentieth centuries, but that they cannot be **invoked** to explain the rapid warming in recent decades. ■

1. **According to paragraph 1, which of the following must we find out in order to determine the impact of human activities upon climate?**
  - (A) The major changes in climate over the past millennia
  - (B) The degree to which the climate varies naturally
  - (C) The best method for measuring climatic change
  - (D) The millennium when humans began to interfere with the climate
2. **According to paragraph 2, an advantage of proxy records over instrumental records is that**
  - (A) they are more-reliable measures of climatic variability in the past century
  - (B) they provide more-accurate measures of local temperatures
  - (C) they provide information on climate fluctuations further back in time
  - (D) they reveal information about the human impact on the climate
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Because physical and chemical properties of substances are unchanging, they are useful records of climate fluctuations over time.
  - (B) For hundreds or thousands of years, people have been observing changes in the chemical and physical properties of substances in order to infer climate change.
  - (C) Because it takes long periods of time for the climate to change, systematic changes in the properties of substances are difficult to observe.
  - (D) Changes in systematically deposited substances that are affected by climate can indicate climate variations over time.
4. **According to paragraph 3, scientists are able to reconstruct proxy temperature records by**
  - (A) studying regional differences in temperature variations
  - (B) studying and dating changes in the properties of substances
  - (C) observing changes in present day climate conditions
  - (D) inferring past climate shifts from observations of current climatic changes
5. **The word “striking” in the passage is closest in meaning to**
  - (A) noticeable
  - (B) confusing
  - (C) true
  - (D) unlikely
6. **According to paragraphs 3 and 4, proxy data have suggested all of the following about the climate EXCEPT**
  - (A) Regional climates may change overtime.
  - (B) The climate has changed very little in the past 10,000 years.
  - (C) Global temperatures vary more than regional temperatures.
  - (D) Important natural changes in climate have occurred over large timescales.
7. **The word “erratic” in the passage is closest in meaning to**
  - (A) dramatic
  - (B) important
  - (C) unpredictable
  - (D) common
8. **All of the following are mentioned in paragraph 5 as natural causes of climate change EXCEPT**
  - (A) atmospheric changes
  - (B) the slow movement of landmasses
  - (C) fluctuations in the amount of ice and snow
  - (D) changes in ocean activity
9. **According to paragraph 6, which of the following is true of computer models of the global climate?**
  - (A) The information they produce is still limited.
  - (B) They are currently most useful in understanding past climatic behaviors.
  - (C) They allow researchers to interpret the data obtained from proxy records.

(D) They do not provide information about regional climates.

**10. The word “deliberations” in the passage is closest in meaning to**

- (A) records
- (B) discussions
- (C) results
- (D) variations

**11. The word “invoked” in the passage is closest in meaning to**

- (A) demonstrated
- (B) called upon
- (C) supported
- (D) expected

**12. What is the author’s purpose in presenting the information in paragraph 7?**

- (A) To compare the influence of volcanoes and solar activity on climate variability with the influence of factors external to the global climate system
- (B) To indicate that there are other types of influences on climate variability in addition to those previously discussed
- (C) To explain how external influences on climate variability differ from internal influences
- (D) To argue that the rapid warming of Earth in recent decades cannot be explained

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Indeed, the contribution of volcanoes and solar activity would more likely have been to actually reduce the rate of warming slightly.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

A number of different and complex factors influence changes in the global climate over long periods of time.

**Answer choices**

- (A) In the absence of instrumental records, proxy data allow scientists to infer information about past climates.
- (B) Scientists see a consistent pattern in the global temperature variations that have occurred in the past.
- (C) Computer models are used to estimate how the different causes of climate variability combine to account for the climate variability that occurs.
- (D) Scientists have successfully separated natural climate variation from changes related to human activities.
- (E) Scientists believe that activities outside the global climate system, such as volcanoes and solar activity may have significant effects on the system.
- (F) Scientists have concluded that human activity accounts for the rapid global warming in recent decades.

### 参考答案与解析

1. 选 **B**。以 human activities 定位至第一句，说在判断人类对气候的影响之前必须断定自然的影响，所以 B 正确。A 和 D 都提到了 millennium，这是这句话没说到的，所以两个都错；C 的 best method 也没说。
2. 选 **C**。以 proxy records 定位至最后一句，a better picture of fluctuations further back in time，指的是时间更久远，所以答案是 C。
3. 选 **D**。去掉定语从句后，原文变成 substance can be deposited to record blabla，A 和 C 的因果关系是硬造出来的，原文没有，错；而且 A 说 unchanging，原文是变化，A 说反；B 原文是 record，不是 infer，B 错；而且 C 说 difficult to observe，原文没说，错；D 正确。
4. 选 **B**。以 proxy temperature records 做关键词定位至第四句，本句说了很多重建温度的很多方法，无论是冰川，沉积物还是碳酸盐，都属于 substance，所以 B 正确，其他都没说。
5. 选 **A**。striking 显著的，吸引人的，所以 noticeable 引人注意的正确。
6. 选 **C**。A 和 D 在第一句，说气候在一段时间内会变化；第二句里的 stability 对应 B 中的 changed little，所以这三项都正确，不选；只有 C 没说，所以 C 是答案。
7. 选 **C**。erratic 不规则的，所以 C 的 unpredictable 正确。
8. 选 **B**。EXCEPT 题，排除法。A 对应第二句的 fluctuation of the atmosphere，正确，不选；B 与原文的 changes in land surface 有明显区别，错，选；C 对应原文的 extent of ice and snow，正确，不选；D 对应原文的 erratic behavior of the ocean，正确，不选。
9. 选 **A**。以 computer models 做关键词定位至第一句，但这句只是在单纯重复问题，所以往下看。说 computer model 能给出气候的 complexity，并且给出 limited info，只有 A 答案说到 limited info，所以 A 正确。其他都没说。
10. 选 **B**。deliberation 深思熟虑、审议，所以 discussions 正确。
11. 选 **B**。invoke 引起，求助，in 表示内部，voke 表示声音，所以 call upon 引起正确。
12. 选 **B**。问整段的关注第一句，这句说除了 internal 之外，还有 external，是一个典型的承上启下的句子，启下的才是这段要说的，也就是 external 的部分，所以答案是 B。A 和 C 都说比较，而原文根本没有比较；D 错因为原文没有 argue。
13. 选 **D**。三个过渡点，名词 volcanoes and solar activity，warming 和副词 indeed，根据 volcanoes and solar activity 确定 C 或者 D 正确；indeed 有转折意思，前文说快速 warming，紧接着就转折说应该是减少 warming 的，所以正确答案是 D。
14. 选 **ACE**。A 选项对应原文第二段首末句，正确；B 选项和第三段的尾句相反，错误，不选；C 选项对应原文第六段，正确；D 选项与第一段的首句相反，不选；E 选项对应原文第七段的首句，正确；F 选项原文没说，不选。

### 笔记区

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用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Seventeenth-Century European Economic Growth**

In the late sixteenth century and into the seventeenth, Europe continued the growth that had lifted it out of the relatively less prosperous medieval period (from the mid 400s to the late 1400s). Among the **key** factors behind this growth were increased agricultural productivity and an expansion of trade.

Populations cannot grow unless the rural economy can produce enough additional food to feed more people. During the sixteenth century, farmers brought more land into cultivation at the expense of forests and fens (low-lying wetlands). Dutch land reclamation in the Netherlands in the sixteenth and seventeenth centuries provides the most spectacular example of the expansion of farmland: the Dutch reclaimed more than 36,000 acres from 1590 to 1615 alone.

Much of the potential for European economic development lay in what at first glance would seem to have been only sleepy villages. Such villages, however, generally lay in regions of relatively advanced agricultural production, permitting not only the survival of peasants but also the accumulation of an agricultural surplus for investment. They had access to urban merchants, markets, and trade routes.

Increased agricultural production in turn facilitated rural industry, an intrinsic part of the expansion of industry. Woolens and textile manufacturers, in particular, utilized rural cottage (in-home) production, which took advantage of cheap and plentiful rural labor. In the German states, the ravages of the Thirty Years' War (1618–1648) further moved textile production into the countryside. Members of poor peasant families spun or wove cloth and linens at home for scant remuneration in an attempt to supplement **meager** family income.

More extended trading networks also helped develop Europe's economy in this period. **English and Dutch ships carrying rye from the Baltic states reached Spain and Portugal.** Population growth generated an expansion of small-scale manufacturing, particularly of handicrafts, textiles, and metal production in England, Flanders, parts of northern Italy, the southwestern German states, and parts of Spain. Only iron smelting and mining required marshaling a significant amount of capital (wealth invested to create more wealth).

The development of banking and other financial services contributed to the expansion of trade. By the middle of the sixteenth century, financiers and traders commonly accepted bills of exchange in place of gold or silver for other goods. Bills of exchange, which had their origins in medieval Italy, were promissory notes (written promises to pay a specified amount of money by a certain date) that could be sold to third parties. In this way, they provided credit. ■ At mid-century, an Antwerp financier only slightly exaggerated when he claimed, "One can no more trade without bills of exchange than sail without water." ■ Merchants no longer had to carry gold and silver over long, dangerous journeys. ■ An Amsterdam merchant purchasing soap from a merchant in Marseille could go to an exchanger and pay the exchanger the equivalent sum in guilders, the Dutch currency. ■ The exchanger would then send a bill of exchange to a colleague in Marseille, authorizing the colleague to pay the Marseille merchant in the merchant's own currency after the actual exchange of goods had taken place.

Bills of exchange contributed to the development of banks, as exchangers began to provide loans. Not until the eighteenth century, however, did such banks as the Bank of Amsterdam and the Bank of England begin to provide capital for business investment. Their principal function was to provide funds for the state.

The rapid expansion in international trade also benefitted from an infusion of capital, stemming largely from gold and silver brought by Spanish vessels from the Americas. This capital financed the production of goods, storage, trade, and even credit across Europe and overseas. Moreover an increased credit supply was generated by investments and loans by bankers and wealthy merchants to states and by joint-stock partnerships—an **English innovation** (the first major company began in 1600). Unlike short-term financial cooperation between investors for a single commercial undertaking, joint-stock companies provided permanent funding of capital by drawing on the investments of merchants and other investors who purchased shares in the company.

1. **According to paragraph 1, what was true of Europe during the medieval period?**
  - (A) Agricultural productivity declined.
  - (B) There was relatively little economic growth.
  - (C) The general level of prosperity declined.
  - (D) Foreign trade began to play an important role in the economy.
2. **The word “key” in the passage is closest in meaning to**
  - (A) historical
  - (B) many
  - (C) important
  - (D) hidden
3. **According to paragraph 2, one effect of the desire to increase food production was that**
  - (A) land was cultivated in a different way
  - (B) more farmers were needed
  - (C) the rural economy was weakened
  - (D) forests and wetlands were used for farming
4. **According to paragraph 3, what was one reason villages had such great economic potential?**
  - (A) Villages were located in regions where agricultural production was relatively advanced.
  - (B) Villages were relatively small in population and size compared with urban areas.
  - (C) Some village inhabitants made investments in industrial development.
  - (D) Village inhabitants established markets within their villages.
5. **Paragraph 4 supports the idea that increased agricultural production was important for the expansion of industry primarily because it**
  - (A) increased the number of available workers in rural areas
  - (B) provided new types of raw materials for use by industry
  - (C) resulted in an improvement in the health of the rural cottage workers used by manufacturers
  - (D) helped repair some of the ravages of the Thirty Years’ War
6. **The word “meager” in the passage is closest in meaning to**
  - (A) very necessary
  - (B) very low
  - (C) traditional
  - (D) primary
7. **Why does the author mention that “English and Dutch ships carrying rye from the Baltic states reached Spain and Portugal.”?**
  - (A) To suggest that England and the Netherlands were the two most important trading nations in seventeenth-century Europe
  - (B) To suggest how extensive trading relations were
  - (C) To contrast the importance of agricultural products with manufactured products
  - (D) To argue that shipping introduced a range of new products
8. **By including the quotation in paragraph 6 by the financier from Antwerp, the author is emphasizing that**
  - (A) sailing was an important aspect of the economy
  - (B) increasing the number of water routes made trade possible
  - (C) bills of exchange were necessary for successful trading
  - (D) financiers often exaggerated the need for bills of exchange
9. **According to paragraph 6, merchants were able to avoid the risk of carrying large amounts of gold and silver by**
  - (A) using third parties in Marseille to buy goods for them
  - (B) doing all their business by using Dutch currency
  - (C) paying for their purchases through bills of exchange
  - (D) waiting to pay for goods until the goods had been delivered
10. **According to paragraph 7, until the eighteenth century, it was the principal function of which of the following to provide funds for the state?**

- (A) Bills of exchange
- (B) Exchangers who took loans
- (C) Banks
- (D) Business investment

**11. The phrase “an English innovation” in the passage is closest in meaning to**

- (A) a new development introduced by the English
- (B) an arrangement found only in England
- (C) a type of agreement negotiated in English
- (D) a type of partnership based on English law

**12. According to paragraph 8, each of the following was a source of funds used to finance economic expansion EXCEPT**

- (A) groups of investors engaged in short-term financial cooperation
- (B) the state
- (C) wealthy merchants
- (D) joint-stock companies

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

They could also avoid having to identify and assess the value of a wide variety of coins issued in many different places.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

In late sixteenth- and early seventeenth-century Europe, increased agricultural production and the expansion of trade were important in economic growth.

**Answer choices**

- (A) Bringing more land under cultivation produced enough food to create surpluses for trade and investment as well as for supporting the larger populations that led to the growth of rural industry.
- (B) Most rural villages established an arrangement with a nearby urban center that enabled villagers to take advantage of urban markets to sell any handicrafts they produced.
- (C) Increases in population and the expansion of trade led to increased manufacturing, much of it small-scale in character but some requiring significant capital investment.
- (D) Increased capital was required for the production of goods, for storage, for trade, and for the provision of credit throughout of Europe as well as distant markets overseas.
- (E) Bills of exchange were invented in medieval Italy but became less important as banks began to provide loans for merchants.
- (F) The expansion of trade was facilitated by developments in banking and financial services and benefitted from the huge influx of capital in the form of gold silver from the Americas.

**笔记区**

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## 参考答案与解析

1. 选 **B**。以 medieval period 定位至第一句，说 medieval period 不那么 prosperous 繁荣，但如果只看这句话很容易错选答案 C，C 的 decline 叫做减少，也就是说 C 说 medieval 时期 prosperity 下降了，但原文说不 prosperous，是一种低的状态，不是下降的趋势，所以 C 错；而 B 的经济几乎没有增长是 less prosperous 的同义替换，正确；A 与 C 错的原因类似；D 没说。
2. 选 **C**。key 关键的，所以 important 正确。
3. 选 **D**。以 increase food production 做关键词定位至第一句，但问的是影响，所以答案应该是下一句。说人们开垦更多土地，以森林和湿地为代价，所以答案是 D。A 原文没说以不同方式开垦，错；B 的 farmers 没有相关信息；C 的 rural economy 没有信息。
4. 选 **A**。以 economic potential 做关键词定位至第一句，但第一句中的 at first glance 和第二句的 however 都说明有用的信息在第二句，说这些村子的 agriculture 是 advanced，所以答案是 A，BCD 都没说。
5. 选 **A**。以 expansion of industry 做关键词定位至第一句，但第一句只是陈述了一个事实，有用的信息在第二句，说那些 manufacturers 利用了大量廉价的 rural labor，所以答案是 A，BCD 都没说。
6. 选 **B**。meager 贫乏的，所以 very low 正确。
7. 选 **B**。修辞目的题，整个句子是一个细节，所以看前一句，也就是本段的中心句，不断扩展的贸易网络有助于当时欧洲经济发展，紧接着就给出了荷兰和英国的船到了西班牙和葡萄牙，用来证明贸易的扩展，所以答案是 B，其他的都不靠谱。
8. 选 **C**。修辞目的题，先以 Antwerp 做关键词定位至第五句，原句整个就是一个细节，看前一句，前一句的信息过少，所以再往前看，就找到答案，说汇票是一种可以转卖给第三方的约定票据，答案是 C，汇票的必要性，当然也可以看第一句，说银行及其他金融服务助推贸易的扩展，同样能选出答案。
9. 选 **C**。以 gold or silver 做关键词定位至第二句，说 financiers 和 traders 接受汇票来替代金银，只有 C 提到了汇票 bills of exchange，所以答案是 C，其他都没说。
10. 选 **C**。以 funds, state 和 principle function 做关键词定位至最后一句，说他们的最主要作用是给国家提供资金，因为有 their，所以往前看，前句说直到十八世纪银行才给 business investment 提供钱，然后就说之前都是给国家提供钱的，their 指的是银行，所以答案 C 正确。
11. 选 **A**。an English innovation 指英国人的发明，即使从本意看，BCD 也不靠谱，而且破折号之后解释之前的内容，之前说 joint-stock partnership，合股，之后的括号又对这一现象进行了解释，说明这是一个以前没有的新东西，所以 A 正确。
12. 选 **B**。EXCEPT 题，排除法。A 的 short-term financial cooperation 对应最后一句，正确，不选；B 好像对应第三句，但原文说银行家和富商贷款给 state，state 的钱是从别人那借的，没法促进发展，所以 B 错，选；C 和 D 都对应原文第三句，正确，不选。
13. 选 **C**。四个过渡点，分别是名词 coins，many different places，代词 they 和副词 also，coins 与原文倒数第二句的 currency 货币同义替换，many different places 与原文倒数第二句的 Amsterdam 和 Marseille 对应，所以 C 或者 D 正确；此外，coins 还可以与倒数第三句的 coins and silver 对应，所以 B 或者 C 正确；而且 they also avoid 说明之前他们已经避免了一件事，刚好对应倒数第三句的 no longer have to carry gold and silver，所以 C 正确。
14. 选 **ACF**。A 选项对应原文第二段第一句，正确；B 选项原文没说，不选；C 选项对应原文第四段第一句，正确；D 选项对应原文第八段第二句，但原文说 capital 促进了 blabla 的发展，没说 blabla 的发展需要资金，所以错，不选；E 选项与第六段第二局说反，不选；F 选项对应原文第六段和第八段的首句，正确。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## Ancient Egyptian Sculpture

In order to understand ancient Egyptian art, it is **vital** to know as much as possible of the elite Egyptians' view of the world and the functions and contexts of the art produced for them. Without this knowledge we can appreciate only the formal content of Egyptian art, and we will fail to understand why it was produced or the concepts that shaped it and caused it to adopt its distinctive forms. In fact, a lack of understanding concerning the purposes of Egyptian art has often led it to be compared unfavorably with the art of other cultures: Why did the Egyptians not develop sculpture in which the body turned and twisted through space like classical Greek statuary? Why do the artists seem to get left and right confused? And why did they not discover the geometric perspective as European artists did in the Renaissance? The answer to such questions has nothing to do with a lack of skill or imagination on the part of Egyptian artists and everything to do with the purposes for which they were producing their art.

The majority of three-dimensional representations, whether standing, seated, or kneeling, exhibit what is called frontality: they face straight ahead, neither twisting nor turning. When such statues are viewed in isolation, out of their original **context** and without knowledge of their function, it is easy to criticize them for their rigid attitudes that remained unchanged for three thousand years. Frontality is, however, directly related to the functions of Egyptian statuary and the contexts in which the statues were set up. Statues were created not for their decorative effect but to play a primary role in the cults of the gods, the king, and the dead. They were designed to be put in places where these beings could manifest themselves in order to be the recipients of ritual actions. Thus it made sense to show the statue looking ahead at what was happening in front of it, so that the living performer of the ritual could interact with the divine or deceased recipient. Very often such statues were enclosed in rectangular shrines or wall niches whose only opening was at the front, making it **natural** for the statue to display frontality. Other statues were designed to be placed within **an architectural setting**, for instance, in front of the monumental entrance gateways to temples known as pylons, or in pillared courts, where **they** would be placed against or between pillars: their frontality worked perfectly within the architectural context.

Statues were normally made of stone, wood, or metal. Stone statues were worked from single rectangular blocks of material and retained the compactness of the original shape. The stone between the arms and the body and between the legs in standing figures or the legs and the seat in seated ones was not normally cut away. From a practical aspect this protected the figures against breakage and psychologically gives the images a sense of strength and power, usually enhanced by a supporting back pillar. By contrast, wooden statues were carved from several pieces of wood that were pegged together to form the finished work, and metal statues were either made by wrapping sheet metal around a wooden **core** or cast by the lost wax process. The arms could be held away from the body and carry separate items in their hands; there is no back pillar. The effect is altogether lighter and freer than that achieved in stone, but because both perform the same function, formal wooden and metal statues still display frontality.

Apart from statues representing deities, kings, and named members of the elite that can be called formal, there is another group of three-dimensional representations that **depicts** generic figures, frequently servants, from the nonelite population. ■ The function of these is quite different. ■ Many are made to be put in the tombs of the elite in order to serve the tomb owners in the afterlife. ■ Unlike formal statues that are limited to static poses of standing, sitting, and kneeling, these figures depict a wide range of actions, such as grinding grain, baking bread, producing pots, and making music, and they are shown in appropriate poses, bending and squatting as they carry out their tasks. ■

1. The word **“vital”** in the passage is closest in meaning to
  - (A) attractive
  - (B) essential
  - (C) usual
  - (D) practical
2. Paragraph 1 suggests that one reason Egyptian art is viewed less favorably than other art is that Egyptian art lacks
  - (A) a realistic sense of human body proportion
  - (B) a focus on distinctive forms of varying sizes
  - (C) the originality of European art
  - (D) the capacity to show the human body in motion
3. In paragraph 1, the author mentions all of the following as necessary in appreciating Egyptian art EXCEPT an understanding of
  - (A) the reasons why the art was made
  - (B) the nature of aristocratic Egyptian beliefs
  - (C) the influences of Egyptian art on later art such as classical Greek art
  - (D) how the art was used
4. According to paragraph 2, why are Egyptian statues portrayed frontality?
  - (A) To create a psychological effect of distance and isolation
  - (B) To allow them to fulfill their important role in ceremonies of Egyptian life
  - (C) To provide a contrast to statues with a decorative function
  - (D) To suggest the rigid, unchanging Egyptian philosophical attitudes
5. The word **“context”** in the passage is closest in meaning to
  - (A) connection
  - (B) influence
  - (C) environment
  - (D) requirement
6. The author mentions **“an architectural setting”** in the passage in order to
  - (A) suggest that architecture was as important as sculpture to Egyptian artists
  - (B) offer a further explanation for the frontal pose of Egyptian statues
  - (C) explain how the display of statues replaced other forms of architectural decoration
  - (D) illustrate the religious function of Egyptian statues
7. The word **“they”** in the passage refers to
  - (A) statues
  - (B) gateways
  - (C) temples
  - (D) pillared courts
8. According to paragraph 3, why were certain areas of a stone statue left uncarved?
  - (A) To prevent damage by providing physical stability
  - (B) To emphasize that the material was as important as the figure itself
  - (C) To emphasize that the figure was not meant to be a real human being
  - (D) To provide another artist with the chance to finish the carving
9. The word **“core”** in the passage is closest in meaning to
  - (A) material
  - (B) layer
  - (C) center
  - (D) frame
10. According to paragraph 3, which of the following statements about wooden statues is true?
  - (A) Wooden statues were usually larger than stone statues.
  - (B) Wooden statues were made from a single piece of wood.
  - (C) Wooden statues contained pieces of metal or stone attached to the front.
  - (D) Wooden statues had a different effect on the viewer than stone statues.

**11. The word “depicts” in the passage is closest in meaning to**

- (A) imagines
- (B) classifies
- (C) elevates
- (D) portrays

**12. According to paragraph 4, what is the difference between statues that represent the Egyptian elite and statues that represent the nonelite classes?**

- (A) Statues of the elite are included in tombs, but statues of the nonelite are not.
- (B) Statues of the elite are in motionless poses, while statues of the nonelite are in active poses.
- (C) Statues of the elite are shown standing, while statues of the nonelite are shown sitting or kneeling.
- (D) Statues of the elite serve an important function, while statues of the nonelite are decorative.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In fact, it is the action and not the figure itself that is important.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The distinctive look of ancient Egyptian sculpture was determined largely by its function.

**Answer choices**

- (A) The twisted forms of Egyptian statues indicate their importance in ritual actions.
- (B) The reason Egyptian statues are motionless is linked to their central role in cultural rituals.
- (C) Stone, wood, and metal statues all display the feature of frontality.
- (D) Statues were more often designed to be viewed in isolation rather than placed within buildings.
- (E) The contrasting poses used in statues of elite and nonelite Egyptians reveal their difference in social status.
- (F) Although the appearances of formal and generic statues differ, they share the same function.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。vital 性命攸关的，B 的 essential 正确。
2. 选 **D**。以 less favorably 定位至第三句，问题问缺乏什么，本句说缺乏对于目的性的理解，冒号后又说为什么埃及的雕塑的 body 不是 turned and twisted，也就是身体是不动的，所以答案是 D 缺乏动作。
3. 选 **C**。EXCEPT 题，排除法。A 的 reasons 对应原文第三句的 understanding concerning the purposes，正确，不选；B 的 aristocratic Egyptian belief 对应第一句的 elite Egyptians' view，正确，不选；C 没有对应的原文，错，选；D 对应第一句的 functions，正确，不选。
4. 选 **B**。以 statue 和 frontality 双关键词定位至第三句，说 frontality 跟珍惜雕塑的作用有关，并在后一句进一步说不是为了装饰，而是确实起到某种实际作用的，所以答案是 B。A 和 D 在原文中都有说到，但都跟问题无关，所以不选；C 的对比从来没说过，所以不对。
5. 选 **C**。context 背景，所以 environment 正确。
6. 选 **B**。修辞题目的题，先看所在的句子，说其他的 statue 主要是放在建筑背景下的，因为有了 other 的出现，说明这只是两个例子中的一个，而之前的那个例子正是之前的一句话，所以再往前看，倒数第三句说可以解释 statue 往前看是在看前面发生了什么，也就是对这段首句提到的 frontality 的一种解释，所以答案是 B，further explanation 对应原文的 other。
7. 选 **A**。指代题，向前找，找主语，而这句话的主语是 statues，所以答案是 A，代入，正确。
8. 选 **A**。uncarved 与原文第二句中的 not normally cut away 重合，但这句只在说明这个现象，往后看，说有两个作用，实用角度能够避免损坏，心理角度能够给人以有力量之感，A 答案防止破坏说到了第一个方面，正确；其他都没说。
9. 选 **C**。core 核心，中心，center 正确。
10. 选 **D**。如果以 wooden statues 做关键词，可能需要大量阅读，所以用排除法。A 的 larger 错，原文没说二者谁大谁小；根据 wooden statues 所在的那句话证明 B 错，因为原文说木质雕塑是由多块拼接而成的；C 错，原文说 metal 的是由 wooden 的核包了外皮做的，没说 wooden 的就有金属外皮；D 对，stone 的 effect 是第三句说的 a sense of strength and power，而 wooden 的 effect 是最后一句说的 lighter and freer，所以不同，而且 by contrast 也说明两者是对照关系。
11. 选 **D**。depict 描述，D 的 portray 描绘正确。
12. 选 **B**。以 elite 和 nonelite 定位至第一句，但通过刚才的题得知，第一句只是在陈述一个现象，并没有说两者具体哪里不同，而正确答案应该在第三句，unlike 说明这句是正确答案。说 formal 的人只有几种姿势，或坐或站，但另外一些人就在做各种劳动，所以 B 正确，C 稍显迷惑，注意二者的区别主要是静止还是干活。
13. 选 **D**。三个过渡点，起到转折连词作用的副词 in fact，两个名词 action 和 figure，根据名词可以确定 C 或者 D 正确；但插入 C 的话无法形成 in fact 体现出的转折意义，所以 D 正确，前面说了 elite 和 nonelite 的区别，然后给出总结，主要的是姿势而不是塑像本身。
14. 选 **BCE**。A 选项与原文第二段第一句相反，不选；B 选项对应原文第二段倒数第四句，正确；C 选项对应原文第三段第一句和最后一句，正确；D 选项原文没说，不选；E 选项对应原文第四段第一句，正确；F 选项与第四段第二句意思相反，不选。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Orientation and Navigation**

To South Americans, robins are birds that fly north every spring. To North Americans, the robins simply vacation in the south each winter. Furthermore, they fly to very specific places in South America and will often come back to the same trees in North American yards the following spring. The question is not why they would leave the cold of winter so much as how they find their way around. The question perplexed people for years, until, in the 1950s, a German scientist named Gustave Kramer provided some answers and, in the process, raised new questions.

Kramer initiated important new kinds of research regarding how animals orient and navigate. Orientation is simply facing in the right direction; navigation involves finding ones way from point A to point B.

Early in his research, Kramer found that caged migratory birds became very restless at about the time they would normally have begun migration in the wild. Furthermore, he noticed that as they fluttered around in the cage, they often launched themselves in the direction of their normal migratory route. **He then set up experiments with caged starlings and found that their orientation was, in fact, in the proper migratory direction except when the sky was overcast, at which times there was no clear direction to their restless movements.** Kramer surmised, therefore, that they were orienting according to the position of the Sun. To test this idea, he blocked their view of the Sun and used mirrors to change its apparent position. He found that under these circumstances, the birds oriented with respect to the new "Sun." They seemed to be using the Sun as a compass to determine direction. At the time, this idea seemed preposterous. How could a bird navigate by the Sun when some of us lose our way with road maps? Obviously, more testing was in order.

So, in another set of experiments, Kramer put identical food boxes around the cage, with food in only one of the boxes. ■ The boxes were stationary, and the one containing food was always at the same point of the compass. ■ However, its position with respect to the surroundings could be changed by revolving either the inner cage containing the birds or the outer walls, which served as the background. ■ As long as the birds could see the Sun, no matter how their surroundings were altered, they went directly to the correct food box. ■ Whether the box appeared in front of the right wall or the left wall, they showed no signs of confusion. On overcast days, however, the birds were disoriented and had trouble locating their food box.

In experimenting with artificial suns, Kramer made another interesting discovery. If the artificial Sun remained stationary, the birds would shift their direction with respect to it at a rate of about 15 degrees per hour, the Sun's rate of movement across the sky. Apparently, the birds were assuming that the "Sun" they saw was moving at that rate. When the real Sun was visible, however, the birds maintained a constant direction as it moved across the sky. In other words, they were able to compensate for the Sun's movement. This meant that some sort of biological clock was operating-and a very precise clock at that.

What about birds that migrate at night? Perhaps they navigate by the night sky. To test the idea, caged night-migrating birds were placed on the floor of a planetarium during their migratory period. A planetarium is essentially a theater with a domelike ceiling onto which a night sky can be projected for any night of the year. When the planetarium sky matched the sky outside, the birds fluttered in the direction of their normal migration. But when the dome was rotated, the birds changed their direction to match the artificial sky. The results clearly indicated that the birds were orienting according to the stars.

There is accumulating evidence indicating that birds navigate by using a wide variety of environmental cues. Other areas under investigation include magnetism, landmarks, coastlines, sonar, and even smells. The studies are complicated by the fact that the data are sometimes contradictory and the mechanisms apparently change from time to time. Furthermore, one sensory ability may back up another.

1. **Which of the following can be inferred about bird migration from paragraph 1?**
  - (A) Birds will take the most direct migratory route to their new habitat.
  - (B) The purpose of migration is to join with larger groups of birds.
  - (C) Bird migration generally involves moving back and forth between north and south.
  - (D) The destination of birds' migration can change from year to year.
2. **The word "perplexed" in the passage is closest in meaning to**
  - (A) defeated
  - (B) interested
  - (C) puzzled
  - (D) occupied
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Experiments revealed that caged starlings displayed a lack of directional sense and restless movements.
  - (B) Experiments revealed that caged starlings were unable to orient themselves in the direction of their normal migratory route.
  - (C) Experiments revealed that the restless movement of caged starlings had no clear direction.
  - (D) Experiments revealed that caged starlings' orientation was accurate unless the weather was overcast.
4. **The word "preposterous" in the passage is closest in meaning to**
  - (A) unbelievable
  - (B) inadequate
  - (C) limited
  - (D) creative
5. **According to paragraph 3, why did Kramer use mirrors to change the apparent position of the Sun?**
  - (A) To test the effect of light on the birds' restlessness
  - (B) To test whether birds were using the Sun to navigate
  - (C) To simulate the shifting of light the birds would encounter along their regular migratory route
  - (D) To cause the birds to migrate at a different time than they would in the wild
6. **According to paragraph 3, when do caged starlings become restless?**
  - (A) When the weather is overcast
  - (B) When they are unable to identify their normal migratory route
  - (C) When their normal time for migration arrives
  - (D) When mirrors are used to change the apparent position of the Sun
7. **Which of the following can be inferred from paragraph 4 about Kramer's reason for filling one food box and leaving the rest empty?**
  - (A) He believed the birds would eat food from only one box.
  - (B) He wanted to see whether the Sun alone controlled the birds' ability to navigate toward the box with food.
  - (C) He thought that if all the boxes contained food, this would distract the birds from following their migratory route.
  - (D) He needed to test whether the birds preferred having the food at any particular point of the compass.
8. **According to paragraph 5, how did the birds fly when the real Sun was visible?**
  - (A) They kept the direction of their flight constant.
  - (B) They changed the direction of their flight at a rate of 15 degrees per hour.
  - (C) They kept flying toward the Sun.
  - (D) They flew in the same direction as the birds that were seeing the artificial Sun.
9. **The experiment described in paragraph 5 caused Kramer to conclude that birds possess a biological clock because**
  - (A) when birds navigate they are able to compensate for the changing position of the Sun in the sky
  - (B) birds' innate bearings keep them oriented in a direction that is within 15 degrees of the Sun's direction
  - (C) birds' migration is triggered by natural environmental cues, such as the position of the Sun

(D) birds shift their direction at a rate of 15 degrees per hour whether the Sun is visible or not

**10. According to paragraph 6, how did the birds navigate in the planetarium's nighttime environment?**

- (A) By waiting for the dome to stop rotating
- (B) By their position on the planetarium floor
- (C) By orienting themselves to the stars in the artificial night sky
- (D) By navigating randomly until they found the correct orientation

**11. Which of the following best describes the author's presentation of information in the passage?**

- (A) A number of experiments are described to support the idea that birds use the Sun and the night sky to navigate.
- (B) The author uses logic to show that the biological clock in birds is inaccurate.
- (C) A structured argument about the importance of internal versus external cues for navigation is presented.
- (D) The opposing points of view about bird migration are clarified through the study of contrasting experiments.

**12. The word "accumulating" in the passage is closest in meaning to**

- (A) new
- (B) increasing
- (C) convincing
- (D) extensive

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

He arranged the feed boxes at various positions on a compass.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Gustave Kramer conducted important research related to the ability of birds to orient and navigate.

**Answer choices**

- (A) Because caged birds become disoriented when the sky is overcast, Kramer hypothesized that birds orient themselves according to the Sun's position.
- (B) In one set of experiments, Kramer placed the box containing food at the same point of the compass each time he put food boxes in the birds' environment.
- (C) Kramer demonstrated that an internal biological clock allows starlings to compensate for the Sun's movement.
- (D) After several studies, Kramer surmised that an internal biological clock allows some species of birds to navigate at night.
- (E) The role of environmental cues in birds' navigation is clear, for on overcast days, birds use objects besides the Sun to orient themselves.
- (F) Kramer showed that night-migrating birds use the sky to navigate by the stars.

### 参考答案与解析

1. 选 **C**。这道题的关键词明显不是很好找，而且排除法的话答案又太长，所以看本段的开头，说南美的鸟春天飞去北方，而北美的鸟冬天飞去南方，所以答案是 C，其他的选项都没有相关信息。
2. 选 **C**。perplex 困惑，所以 C 的 puzzle 正确。
3. 选 **D**。原文的结构是这个人做了一个实验并且有了结果。但四个答案都没说做实验，所以只关注实验结果就可以，说这些鸟的 orientation 除了 overcast 的时候都是对的。ABC 都没说除了 blabla 的条件；所以 D 正确。
4. 选 **A**。preposterous 前后颠倒的，不合理的，荒谬的，想到 pre 表向前，post 表向后，能想出这个意思，所以 unbelievable 难以置信的正确。
5. 选 **B**。以人名和 mirror 做关键词定位至第四、五句，说这个人认为鸟是用太阳导航的，为了验证这个观点，这个人用镜子做了一个实验，所以做这个实验的目的就是验证鸟是不是用太阳导航的，答案是 B，其他都没说。
6. 选 **C**。以 caged starling 定位至第三句，注意此题容易误选 A，但原文说 overcast 的时候鸟的 migratory orientation 就没方向，跟 restless 无关。以 restless 定位至第一句，说这些鸟在 migration 的时候开始 restless，所以答案是 C。B 跟 A 在同一句，都与问题无关，所以错；D 在第四句，也跟问题无关，不选。
7. 选 **B**。以 food box 定位至本段倒数两句，说不管盒子怎么放鸟都不会晕，但阴天的时候就会晕，结合前文一直在说的 K 做的实验，说明鸟是用太阳识别方向的，所以答案是 B，而且这段一开始就说 another set of experiments 所以可以往前看，前一段也在说鸟用太阳辨别方向，所以这段说的只是一系列试验中的一个，其他没说。
8. 选 **A**。以 real sun 做关键词定位至倒数第二句，说当真的太阳能看到的时候，鸟的飞行方向不变。A 说 flying direction 是 constant 持续的，完全改写，是正确答案。C 虽然说了飞行方向不变，但没说鸟是朝着太阳飞的；B 的 15 度和 D 的与人造太阳时飞行的方向一致都没说。
9. 选 **A**。以 biological clock 做关键词定位至最后一句，但这句一开始就说这意味着 blabla，所以往前看，说这些鸟保持飞行方向不变是因为他们能弥补太阳位置变化引起的变化，所以 A 是答案，B 和 D 都说了，但不能成为有 biological clock 的原因，而 C 完全没说。
10. 选 **C**。以 planetarium 做关键词定位至第三句，但这句只在说一个现象，所以往下看，当 planetarium 的 sky 与外面的一样，鸟就正常迁徙；不一样的时候鸟就根据人造的 sky 定位，最后得出是用星星定位的，所以 C 是答案，其他的没说。
11. 选 **A**。修辞目的题，问整段的，所以看首句，说鸟是靠 night sky 定位的，尾句又说是靠星星，所以这段应该在说鸟在夜间定位的方法，前几段都在说白天鸟用太阳定位，所以综合起来，答案是 A，分别叙述鸟在日间和夜间的定位方法。
12. 选 **B**。accumulate 累积，所以 increasing 正确。
13. 选 **A**。四个过渡点，代词 he，名词 feed boxes 和名词 compass。根据 compass 确定答案是 A 或者 B 正确；代词 he 确定 A 可能正确；box 多次出现，不使用；所以确定 A 正确。待插入句说把 boxes 放在 compass 的各个位置，然后紧接着就说 box 是什么样。
14. 选 **ACF**。A 选项对应原文第三段第四句，正确；B 选项与原文第四段首句相反，不选；C 选项对应原文第五段后两句，正确；D 选项与原文第六段最后一句相反，不选；E 选项原文没说，不选；F 选项对应原文第六段最后一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

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用时：     分     秒

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错误：     个

**Begging by Nestlings**

Many signals that animals make seem to **impose on** the signalers costs that are overly damaging. ■ A classic example is noisy begging by nestling songbirds when a parent returns to the nest with food. ■ These loud cheeps and peeps might give the location of the nest away to a listening hawk or raccoon, resulting in the death of the defenseless nestlings. ■ In fact, when tapes of begging tree swallows were played at an artificial swallow nest containing an egg, the egg in that “noisy” nest was taken or destroyed by predators before the egg in a nearby quiet nest in 29 of 37 trials. ■

Further evidence for the costs of begging comes from a study of differences in the begging calls of warbler species that nest on the ground versus those that nest in the relative safety of trees. The young of ground-nesting warblers produce begging cheeps of higher frequencies than do their tree-nesting relatives. These higher-frequency sounds do not travel as far, and so may better conceal the individuals producing them, who are especially vulnerable to predators in their ground nests. David Haskell created **artificial** nests with clay eggs and placed them on the ground beside a tape recorder that played the begging calls of either tree-nesting or of ground-nesting warblers. The eggs “advertised” by the tree-nesters’ begging calls were found bitten significantly more often than the eggs associated with the ground-nesters’ calls.

The hypothesis that begging calls have evolved properties that reduce their potential for attracting predators yields a **prediction**: baby birds of species that experience high rates of nest predation should produce softer begging signals of higher frequency than nestlings of other species less often victimized by nest predators. This prediction was supported by data collected in one survey of 24 species from an Arizona forest, more evidence that predator pressure favors the evolution of begging calls that are hard to detect and **pinpoint**.

Given that predators can make it costly to beg for food, what benefit do begging nestlings **derive** from their communications? One possibility is that a noisy baby bird provides accurate signals of its real hunger and good health, making it worthwhile for the listening parent to give it food in a nest where several other offspring are usually available to be fed. If this hypothesis is true, then it follows that nestlings should adjust the intensity of their signals in relation to the signals produced by their nestmates, who are competing for parental attention. When experimentally deprived baby robins are placed in a nest with normally fed siblings, the hungry nestlings beg more loudly than usual—but so do their better-fed siblings, though not as loudly as the hungrier birds.

If parent birds use begging intensity to direct food to healthy offspring capable of vigorous begging, then parents should make food delivery decisions on the basis of their offsprings’ calls. Indeed, if you take baby tree swallows out of a nest for an hour feeding half the set and starving the other half, when the birds are replaced in the nest, the starved youngsters beg more loudly than the fed birds, and the parent birds feed the active beggars more than those who beg less vigorously.

As these experiments show, begging apparently provides a signal of need that parents use to make judgments about which offspring can benefit most from a feeding. But the question arises, why don’t nestlings beg loudly when they aren’t all that hungry? By doing so, they could possibly secure more food, which should result in more rapid growth or larger size, either of which is advantageous. The answer lies apparently not in the increased energy costs of exaggerated begging—such energy costs are small relative to the potential gain in calories—but rather in the damage that any successful cheater would do to its siblings, which share genes with one another. An individual’s success in propagating his or her genes can be affected by more than just his or her own personal reproductive success. Because close relatives have many of the same genes, animals that harm their close relatives may in effect be destroying some of their own genes. Therefore, a begging nestling that secures food at the expense of its siblings might actually leave behind fewer copies of its genes overall than it might otherwise.

1. The phrase “impose on” in the passage is closest in meaning to
  - (A) increase for
  - (B) remove from
  - (C) place on
  - (D) distribute to
2. According to paragraph 1, the experiment with tapes of begging tree swallows establishes which of the following?
  - (A) Begging by nestling birds can attract the attention of predators to the nest.
  - (B) Nest predators attack nests that contain nestlings more frequently than they attack nests that contain only eggs.
  - (C) Tapes of begging nestlings attract predators to the nest less frequently than real begging calls do.
  - (D) Nest predators have no other means of locating bird nests except the begging calls of nestling birds.
3. The word “artificial” in the passage is closest in meaning to
  - (A) attractive
  - (B) not real
  - (C) short-term
  - (D) well designed
4. Paragraph 2 indicates that the begging calls of tree nesting warblers
  - (A) put them at more risk than ground-nesting warblers experience
  - (B) can be heard from a greater distance than those of ground-nesting warblers
  - (C) are more likely to conceal the signaler than those of ground-nesting warblers
  - (D) have higher frequencies than those of ground-nesting warblers
5. The experiment described in paragraph 2 supports which of the following conclusions?
  - (A) Predators are unable to distinguish between the begging cheeps of ground-nesting and those of tree-nesting warblers except by the differing frequencies of the calls.
  - (B) When they can find them, predators prefer the eggs of tree-nesting warblers to those of ground-nesting warblers.
  - (C) The higher frequencies of the begging cheeps of ground-nesting warblers are an adaptation to the threat that ground-nesting birds face from predators.
  - (D) The danger of begging depends more on the frequency of the begging cheep than on how loud it is.
6. The word “prediction” in the passage is closest in meaning to
  - (A) surprise
  - (B) discovery
  - (C) explanation
  - (D) expectation
7. The word “pinpoint” in the passage is closest in meaning to
  - (A) observe
  - (B) locate exactly
  - (C) copy accurately
  - (D) recognize
8. The word “derive” in the passage is closest in meaning to
  - (A) require
  - (B) gain
  - (C) use
  - (D) produce
9. In paragraphs 4 and 5, what evidence supports the claim that the intensity of nestling begging calls is a good indicator of which offspring in a nest would most benefit from a feeding?
  - (A) When placed in a nest with hungry robins, well-fed robins did not beg for food.
  - (B) Among robin nestlings, the intensity of begging decreased the more the nestlings were fed.
  - (C) Hungry tree swallow nestlings begged louder than well-fed nestlings in the same nest.
  - (D) Hungry tree swallow nestlings continued to beg loudly until they were fed whereas well-fed nestlings soon stopped begging.

**10. It can be inferred from paragraphs 4 and 5 that parent songbirds normally do not feed**

- (A) nestlings that are too weak to beg for food as vigorously as their nestmates
- (B) more than one hungry nestling during a single visit to the nest
- (C) offspring that were fed by the parents on the previous visit to the nest
- (D) nestlings that have been removed and then later put back into their nest

**11. In paragraph 6, the author compares the energy costs of vigorous begging with the potential gain in calories from such begging in order to**

- (A) explain why begging for food vigorously can lead to faster growth and increased size
- (B) explain how begging vigorously can increase an individual's chance of propagating its own genes
- (C) point out a weakness in a possible explanation for why nestlings do not always beg vigorously
- (D) argue that the benefits of vigorous begging outweigh any possible disadvantages

**12. According to paragraph 6, which of the following explains the fact that a well-fed nestling does not beg loudly for more food?**

- (A) There is no benefit for a nestling to get more food than it needs to survive.
- (B) By begging loudly for food it does not need, a nestling would unnecessarily expose itself to danger from predators.
- (C) If a nestling begs loudly when it is not truly hungry, then when it is truly hungry its own begging may be drowned out by that of its well-fed siblings.
- (D) More of a nestling's genes will be passed to the next generation if its hungry siblings get enough food to survive.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The cheeping provides important information to the parent, but it could also attract the attention of others.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Experiments have shed much light on the begging behaviors of baby songbirds.

**Answer choices**

- (A) Songbird species that are especially vulnerable to predators have evolved ways of reducing the dangers associated with begging calls.
- (B) Songbird parents focus their feeding effort on the nestlings that beg loudest for food.
- (C) It is genetically disadvantageous for nestlings to behave as if they are really hungry when they are not really hungry.
- (D) The begging calls of songbird nestlings provide a good example of overly damaging cost to signalers of signaling.
- (E) The success with which songbird nestlings communicate their hunger to their parents is dependent on the frequencies of the nestlings' begging calls.
- (F) Songbird nestlings have evolved several different ways to communicate the intensity of their hunger to their parents.

### 参考答案与解析

1. 选 **C**。impose on 施加影响，所以 place on 施加是正确答案。
2. 选 **A**。以 tapes of begging tree swallows 做关键词定位至最后一句，但这只说明放了 tape 的 nest 会遭受更多攻击，没说为什么，往前看，上句说 cheeps 泄露了信息给捕食者，使得鸟窝遭受攻击，然后就举了 tape 的例子，无非是说 cheeps 吸引了攻击，所以 A 正确。B 和 C 的两个比较原文没说，D 的没有其他手段也没说。
3. 选 **B**。artificial 人造的，所以 not real 正确。
4. 选 **B**。此题较难，需要阅读较多内容，因为关键词 tree-nestling warblers 多次出现。后半段说了 David 的实验，所以只是一个事实，往前看，看到第二句和第三句说 ground-nestling 的鸟发出的声音是高频的，传播的不远，而 tree-nestling 与之相反，所以答案 B 传播的更远正确。C 和 D 明显说反；B 和 C 是意思相反的答案。A 具有迷惑性，原文只是说在试验中 tree nestling 的鸟蛋被咬得很惨，没说 tree 的就一定比 ground 的危险。
5. 选 **C**。排除法，A 选项原文完全没有对应，原文没说除了 frequency 什么方法都没有；B 原文也没有对应，没说 predator 更喜欢哪个；C 选项正确，对应原文第二句和第三句；D 选项没有对应。
6. 选 **D**。predict 预测，所以 expectation 正确。
7. 选 **B**。pinpoint 瞄准，所以 locate exactly 正确。
8. 选 **B**。derive 获取，获得，所以 gain 正确。
9. 选 **C**。排除法。A 的 robins 做关键词定位至第四段最后一句，原文说即使 well-fed 的鸟也叫，只是叫的不厉害罢了，所以 C 正确，A 说反；同一句话可以得到 B 没说，原文没说喂食越多鸟越不叫；D 的 whereas 之前是对的，但原文也没说 well-fed 的很快就不叫了，应该是继续叫。
10. 选 **A**。排除法。B 的 more than one 对应第四段第二句的最后半句，原文说 nest 里面有很多鸟都等着喂，所以 parent 可以喂很多鸟，所以 B 说反；同时这句话说叫声给鸟带来的好处就是有食物吃，那么反过来就是不叫的没有食物吃，所以 A 正确，parent 不喂那些不叫的鸟；C 在文章中没有对应，不选；D 的 remove 定位至第五段最后一句，说当那些鸟被 replace 时候，其他鸟叫的更欢，所以 parent 就喂那些叫得欢的鸟更多，但不是不喂不叫的鸟，所以 D 错。
11. 选 **C**。首先根据问题中的比较定位至第四句，说 such energy costs are small relative to the potential gain in calories，先把所在的句子读清楚，说这种夸张的 begging 会对其他的 sibling 造成伤害，进而伤害到整个群体，所以答案是 C，给出一个鸟夸张 begging 的缺点。A 说了但不是目的；B 没说 D 说反。
12. 选 **D**。从上题的第四句读起，说会伤害 sibling，紧接着说同一物种有很多共同基因，伤害 siblings 意味着伤害整个物种的基因，所以 D 正确。
13. 选 **B**。三个过渡点，分别是名词 cheeping，parent 和代词 others，根据 cheeping 能够判断 B 或者 C 正确；parent 能够断定 A 或者 B 正确，所以正确答案是 B，而且 others 和后面的 listening hawk or raccoon 刚好对应；此外 B 点之后的 these cheeps 刚好指代待插入句当中的 cheeping。
14. 选 **ABC**。A 选项对应原文第二段第三句，注意这段的首句不是中心句，整个段都在说两种鸟的对比，所以这个选项正确；B 选项对应原文第四段第二句，正确；C 选项对应整个第六段的后半部分，正确；D 选项原文没说，不选；E 选项原文没说，不选；F 选项原文没说，不选。

### 笔记区

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## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Which Hand Did They Use

We all know that many more people today are right-handed than left-handed. Can one trace this same pattern far back in prehistory? ■ Much of the evidence about right-hand versus left-hand dominance comes from stencils and prints found in rock shelters in Australia and elsewhere, and in many Ice Age caves in France, Spain, and Tasmania. ■ When a left hand has been stenciled, this implies that the artist was right-handed, and vice versa. ■ Even though the paint was often sprayed on by mouth, one can assume that the dominant hand assisted in the operation. One also has to make the assumption that hands were stenciled palm downward—a left hand stenciled palm upward might of course look as if it were a right hand. ■ Of 158 stencils in the French cave of Gargas, 136 have been identified as left, and only 22 as right; right-handedness was therefore heavily predominant.

Cave art furnishes other types of evidence of this phenomenon. **Most engravings, for example, are best lit from the left, as befits the work of right-handed artists, who generally prefer to have the light source on the left so that the shadow of their hand does not fall on the tip of the engraving tool or brush.** In the few cases where an Ice Age figure is depicted holding something, it is mostly, though not always, in the right hand.

Clues to right-handedness can also be found by other methods. Right-handers tend to have longer, stronger, and more muscular bones on the right side, and Marcellin Boule as long ago as 1911 noted the La Chapelle-aux-Saints Neanderthal skeleton had a right upper arm bone that was noticeably stronger than the left. Similar observations have been made on other Neanderthal skeletons such as La Ferrassie I and Neanderthal itself.

Fractures and other cut marks are another source of evidence. Right-handed soldiers tend to be wounded on the left. The skeleton of a 40- or 50-year-old Nabatean warrior, buried 2,000 years ago in the Negev Desert, Israel, had multiple healed fractures to the skull, the left arm, and the ribs.

Tools themselves can be revealing. Long-handed Neolithic spoons of yew wood preserved in Alpine villages dating to 3000 B.C. have survived; the signs of rubbing on their left side indicate that their users were right-handed. The late Ice Age rope found in the French cave of Lascaux consists of fibers spiraling to the right, and was therefore tressed by a righthander.

Occasionally one can determine whether stone tools were used in the right hand or the left, and it is even possible to assess how far back this feature can be traced. In stone toolmaking experiments, Nick Toth, a right-hander, held the core (the stone that would become the tool) in his left hand and the hammer stone in his right. As the tool was made, the core was rotated clockwise, and the flakes, removed in sequence, had a little crescent of cortex (the core's outer surface) on the side. Toth's knapping produced 56 percent flakes with the cortex on the right, and 44 percent left-oriented flakes. A left-handed toolmaker would produce the opposite pattern. Toth has applied these criteria to the similarly made pebble tools from a number of early sites (before 1.5 million years) at Koobi Fora, Kenya, probably made by *Homo habilis*. At seven sites he found that 57 percent of the flakes were right-oriented, and 43 percent left, a pattern almost identical to that produced today.

About 90 percent of modern humans are right-handed: we are the only mammal with a preferential use of one hand. The part of the brain responsible for fine control and movement is located in the left cerebral hemisphere, and the findings above suggest that the human brain was already asymmetrical in its structure and function not long after 2 million years ago. Among Neanderthals of 70,000–35,000 years ago, Marcellin Boule noted that the La Chapelle-aux-Saints individual had a left hemisphere slightly bigger than the right, and the same was found for brains of specimens from Neanderthal, Gibraltar, and La Quina.

1. The phrase “**assisted in**” in the passage is closest in meaning to
  - (A) initiated
  - (B) dominated
  - (C) helped with
  - (D) setup
2. It can be inferred from paragraph 1 that even when paint was sprayed by mouth to make a hand stencil
  - (A) there was no way to tell which hand was stenciled
  - (B) the stenciled hand was the weaker hand
  - (C) the stenciled hand was the dominant hand
  - (D) artists stenciled more images of the dominant hand than they did of the weak
3. The phrase “**depicted**” in the passage is closest in meaning to
  - (A) identified
  - (B) revealed
  - (C) pictured
  - (D) imagined
4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Right-handed artists could more easily have avoided casting shadows on their work, because engravings in prehistoric caves were lit from the left.
  - (B) The tips of engraving tools and brushes indicate that these instruments were used by right-handed artists whose work was lit from the left.
  - (C) The best lighting for most engravings suggests that they were made by right-handed people trying to avoid the shadow of their hands interfering with their work.
  - (D) Right-handed artists try to avoid having the brush they are using interfere with the light source.
5. All of the following are mentioned in paragraphs 1 and 2 as evidence of right-handedness in art and artists EXCEPT
  - (A) the ideal source of lighting for most engravings
  - (B) the fact that a left hand stenciled palm upward might look like a right hand
  - (C) the prevalence of outlines of left hands
  - (D) figures in prehistoric art holding objects with the right hand
6. According to paragraph 3, the La Chapelle-aux-Saints Neanderthal skeleton can be identified as right-handed because
  - (A) other Neanderthal skeletons found nearby are also right-handed
  - (B) the right arm bone is stronger than the left
  - (C) it is similar to skeletons of La Ferrassie I and Neanderthal
  - (D) the right side of the skeleton shows less evidence of fractures
7. Which of the following statements about fractures and cut marks can be inferred from paragraph 4?
  - (A) Fractures and cut marks caused by right-handed soldiers tend to occur on the right side of the injured party's body.
  - (B) The right arm sustains more injuries because, as the dominant arm, it is used more actively.
  - (C) In most people, the left side of the body is more vulnerable to injury since it is not defended effectively by the dominant arm.
  - (D) Fractures and cut marks on fossil humans probably occurred after death.
8. According to paragraph 5, what characteristic of a Neolithic spoon would imply that the spoon's owner was right-handed?
  - (A) The direction of the fibers
  - (B) Its long handle
  - (C) The yew wood it is carved from
  - (D) Wear on its left side

9. In paragraph 5, why does the author mention the Ice Age rope found in the French cave of Lascaux?
- (A) As an example of an item on which the marks of wear imply that it was used by a right-handed person
  - (B) Because tressing is an activity that is easier for a right-handed person than for a left-handed person
  - (C) Because the cave of Lascaux is the site where researchers have found several prehistoric tools made for right-handed people
  - (D) As an example of an item whose construction shows that it was right handed made by a right-person
10. The word “criteria” in the passage is closest in meaning to
- (A) standards
  - (B) findings
  - (C) ideas
  - (D) techniques
11. What was the purpose of Toth’s toolmaking experiment described in paragraph 6?
- (A) To shape tools that could be used by either hand
  - (B) To produce replicas of early tools for display in museums
  - (C) To imitate the production of pebble tools from early sites
  - (D) To determine which hand made the early tools
12. What is the author’s primary purpose in paragraph 7?
- (A) To illustrate the importance of studying the brain
  - (B) To demonstrate that human beings are the only mammal to desire fine control of movement
  - (C) To contrast the functions of the two hemispheres of the brain
  - (D) To demonstrate that right-hand preference has existed for a long time
13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

The stencils of hands found in these shelters and caves allow us to draw conclusions about which hand was dominant.

Where would the sentence best fit?

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

Several categories of evidence indicate that people have always been predominantly right-handed.

**Answer choices**

- (A) Stencils of right-handed figures are characteristic of cave art in France, Spain, and Tasmania.
- (B) Signs on the skeletal remains of prehistoric figures, including arm-bone size and injury marks, imply that these are the remains of right-handed people.
- (C) Instruments such as spoons, ropes, and pebble tools show signs that indicate they were used or constructed by right-handed people.
- (D) The amount of prehistoric art created by right-handed artists indicates that left-handed people were in the minority.
- (E) Neanderthal skeletons often have longer finger bones in the right hand, which is evidence that the right hand was stronger.
- (F) Nick Toth, a modern right-handed toolmaker, has shown that prehistoric tools were knapped to fit the right hand.

### 参考答案与解析

1. 选 **C**。assist in 帮助，所以 C 的 help with 正确。
2. 选 **B**。以 mouth 和 hand stencil 做关键词定位至倒数第二和第三句，说 dominant hand 是帮忙的；最后一句又说 136 是左手 22 是右手，通过具体数字说明左手比较主要，所以 B 是答案；注意 B 和 C 是一对相反答案，所以 C 错，A 说不知道哪个主要也就错；D 没说。
3. 选 **C**。depict 描述，所以 C 的 pictured 正确。
4. 选 **C**。A 选项关系不对，B 选项内容颠倒，D 选项内容颠倒。
5. 选 **B**。EXCEPT 题，排除法，A 的 engraving 做关键词定位至第二段第二句，正确，不选；B 对应第一段第三句，但这个不是 right-handedness 的原因，所以这个选项不对，选；C 的 prevalence 和 left hand 定位至第一段最后一句，正确，不选；D 的定位至第二段最后一句，正确，不选。
6. 选 **B**。以 La 做关键词定位至倒数第二句，noticeably stronger，答案 B 正确，A 和 C 都有提到，但都不是 La 被认定为 right-handedness 的原因，所以不选，D 没说。
7. 选 **C**。以 fractures and other cut marks 做关键词定位至第一句，但第一句信息太少，往下看，说右撇子士兵伤在左侧，所以正确答案是 C。B 说反，左侧容易受伤；A 和 D 都没说。
8. 选 **D**。以 Neolithic spoon 定位至第二句，但这句没有回答问题，问题问的是什么特点表明 right-handed，所以往后看找到答案，signs of rubbing，摩擦痕迹，所以答案是 wear，注意 wear 有一个意思是摩擦。
9. 选 **D**。以 Ice Age rope 做关键词定位至最后一句，说 rope 是右旋的，说明是一个右撇子弄的，所以答案是 D，一个例子，右撇子弄出来的。B 和 C 都没说；而 A 说 rope 是右撇子的人用的，原文说 rope 是右撇子的人编制的，不是一回事。
10. 选 **A**。criteria 标准，所以 A 的 standard 正确。
11. 选 **D**。先找到 Toth 的实验在本段第二句，然后读这句话，发现整句话都是一个例子，然后往前看，也就是这段的第一句，说有时候能够确定到底是那只手用了这个工具，所以 T 的例子就是为说明这个的，所以答案是 D，确定早期的工具是那只手做的。
12. 选 **D**。问整段的目的，找中心句，但第一句不是中心句，而且这段也没有中心句。但第一句说人类是唯一有左右撇子现象的动物，最后一句说早在很久以前就有了这种现象，能够对应选项 D，其他都没说。
13. 选 **B**。三个过渡点，名词 shelters，名词 caves 和代词 these，根据 shelters 和 caves 确定 A 或者 B 正确，但 these 说明待插入句应该插入到包含着两个词的句子之后，所以答案 B 正确，A 错。
14. 选 **BCD**。A 选项原文没说，原文说证据来自三个地方，答案说右撇子是三个地方的特点，不一样；B 选项对应原文第三段第二句和第四段一二句，正确；C 选项对应原文第五段第一句，正确；D 选项对应原文第六和第七段的第一句，正确；E 选项是原文第三段中的一个细节，不选；F 选项是原文第六段的一个细节，不选。

### 笔记区

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错误：     个

**Transition to Sound in Film**

The shift from silent to sound film at the end of the 1920s marks, so far, the most important transformation in motion picture history. Despite all the highly visible technological developments in theatrical and home delivery of the moving image that have occurred over the decades since then, no single innovation has come close to being **regarded** as a similar kind of watershed. In nearly every language, however the words are phrased, the most basic division in cinema history lies between films that are mute and films that speak.

Yet this most fundamental standard of historical periodization conceals a host of **paradoxes**. Nearly every movie theater, however modest, had a piano or organ to provide musical accompaniment to silent pictures. In many instances, spectators in the era before recorded sound experienced elaborate aural presentations alongside movies' visual images, from the **Japanese benshi** (narrators) crafting multivoiced dialogue narratives to **original musical compositions** performed by symphony-size orchestras in Europe and the United States. In Berlin, for the premiere performance outside the Soviet Union of *The Battleship Potemkin*, film director Sergei Eisenstein worked with Austrian composer Edmund Meisel (1874–1930) on a musical score matching sound to image; the Berlin screenings with live music helped to bring the film its wide international fame.

Beyond that, the triumph of recorded sound has **overshadowed** the rich diversity of technological and aesthetic experiments with the visual image that were going forward simultaneously in the 1920s. New color processes, larger or differently shaped screen sizes, multiple-screen projections, even television, were among the developments invented or tried out during the period, sometimes with startling success. The high costs of converting to sound and the early limitations of sound technology were among the factors that suppressed innovations or retarded advancement in these other areas. The introduction of new screen formats was put off for a quarter century, and color, though utilized over the next two decades for special productions, also did not become a norm until the 1950s.

**Though it may be difficult to imagine from a later perspective, a strain of critical opinion in the 1920s predicted that sound film would be a technical novelty that would soon fade from sight, just as had many previous attempts, dating well back before the First World War, to link images with recorded sound.** These critics were making a common assumption—that the technological inadequacies of earlier efforts (poor synchronization, weak sound amplification, fragile sound recordings) would invariably occur again. To be sure, their evaluation of the technical flaws in 1920s sound experiments was not so far off the mark, yet they **neglected** to take into account important new forces in the motion picture field that, in a sense, would not take no for an answer.

These forces were the rapidly expanding electronics and telecommunications companies that were developing and linking telephone and wireless technologies in the 1920s. In the United States, they included such firms as American Telephone and Telegraph, General Electric, and Westinghouse. They were interested in all forms of sound technology and all potential avenues for commercial exploitation. Their competition and collaboration were creating the broadcasting industry in the United States, beginning with the introduction of commercial radio programming in the early 1920s. ■ With financial assets considerably greater than those in the motion picture industry, and perhaps a wider vision of the relationships among entertainment and communications media, they revitalized research into recording sound for motion pictures.

■ In 1929 the United States motion picture industry released more than 300 sound films—a rough figure, since a number were silent films with music tracks, or films prepared in dual versions, to take account of the many cinemas not yet wired for sound. ■ At the production level, in the United States the conversion was virtually complete by 1930. ■ In Europe it took a little longer, mainly because there were more small producers for whom the costs of sound were prohibitive, and in other parts of the world problems with rights or access to equipment delayed the shift to sound production for a few more years (though cinemas in major cities may have been wired in order to play foreign sound films). The triumph of sound cinema was swift, complete, and enormously popular.

1. The word “regarded” in the passage is closest in meaning to
  - (A) analyzed
  - (B) considered
  - (C) altered
  - (D) criticized
2. According to paragraph 1, which of the following is the most significant development in the history of film?
  - (A) The technological innovation of sound film during the 1920s
  - (B) The development of a technology for translating films into other languages
  - (C) The invention of a method for delivering movies to people’s homes
  - (D) The technological improvements allowing clearer images in films
3. The word “paradoxes” in the passage is closest in meaning to
  - (A) difficulties
  - (B) accomplishments
  - (C) parallels
  - (D) contradictions
4. Why does the author mention “Japanese benshi” and “original musical compositions”?
  - (A) To suggest that audiences preferred other forms of entertainment to film before the transition to sound in the 1920’s
  - (B) To provide examples of some of the first sounds that were recorded for film
  - (C) To indicate some ways in which sound accompanied film before the innovation of sound films in the late 1920s
  - (D) To show how the use of sound in films changed during different historical periods
5. Paragraph 2 suggests which of the following about Eisenstein’s film *The Battleship Potemkin*?
  - (A) The film was not accompanied by sound before its Berlin screening.
  - (B) The film was unpopular in the Soviet Union before it was screened in Berlin.
  - (C) Eisenstein’s film was the first instance of collaboration between a director and a composer.
  - (D) Eisenstein believed that the musical score in a film was as important as dialogue.
6. The word “overshadowed” in the passage is closest in meaning to
  - (A) distracted from
  - (B) explained
  - (C) conducted
  - (D) coordinated with
7. According to paragraph 3, which of the following is NOT true of the technological and aesthetic experiments of the 1920’s?
  - (A) Because the costs of introducing recorded sound were low, it was the only innovation that was put to use in the 1920’s.
  - (B) The introduction of recorded sound prevented the development of other technological innovations in the 1920’s.
  - (C) The new technological and aesthetic developments of the 1920s included the use of color, new screen formats, and television.
  - (D) Many of the innovations developed in the 1920s were not widely introduced until as late as the 1950’s.
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) It was difficult for some critics in the 1920s to imagine why the idea of sound film had faded from sight well before the First World War.
  - (B) As surprising as it seems today, some critics in the 1920s believed that the new attempts at sound films would fade just as quickly as the attempts made before the First World War.
  - (C) Though some early critics thought that sound film would fade, its popularity during the First World War proved that it was not simply a technical novelty.
  - (D) Although some critics predicted well before the First World War that sound film would be an important technical innovation, it was not attempted until the 1920s.

9. The word “neglected” in the passage is closest in meaning to
- (A) failed
  - (B) needed
  - (C) started
  - (D) expected
10. According to paragraph 4, which of the following is true about the technical problems of early sound films?
- (A) Linking images with recorded sound was a larger obstacle than weak sound amplification or fragile sound recordings.
  - (B) Sound films in the 1920s were unable to solve the technical flaws found in sound films before the First World War.
  - (C) Technical inadequacies occurred less frequently in early sound films than critics suggested.
  - (D) Critics assumed that it would be impossible to overcome the technical difficulties experienced with earlier sound films.
11. In paragraph 5, commercial radio programming is best described as the result of
- (A) a financially successful development that enabled large telecommunications firms to weaken their competition
  - (B) the desire of electronics and telecommunications companies to make sound technology profitable
  - (C) a major development in the broadcasting industry that occurred before the 1920s
  - (D) the cooperation between telecommunications companies and the motion picture industry
12. According to paragraph 6, which of the following accounts for the delay in the conversion to sound films in Europe?
- (A) European producers often lacked knowledge about the necessary equipment for the transition to sound films.
  - (B) Smaller European producers were often unable to afford to add sound to their films.
  - (C) It was often difficult to wire older cinemas in the major cities to play sound films.
  - (D) Smaller European producers believed that silent films with music accompaniment were aesthetically superior to sound films.
13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

When this research resulted in the development of vastly improved sound techniques, film studios became convinced of the importance of converting to sound.

Where would the sentence best fit?

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

The transition from silent to sound films was the most important development in film history.

**Answer choices**

- (A) Although music and speech had frequently accompanied film presentations before the 1920s, there was a strong desire to add sound to the films themselves.
- (B) Because of intense interest in developing and introducing sound in film, the general use of other technological innovations being developed in the 1920s was delayed.
- (C) The rapid progress in sound technology made possible by the involvement of telecommunications companies transformed the motion picture industry.
- (D) Japanese filmmakers had developed the technology for creating sound films before directors in Europe and the United States began experimenting with sound.
- (E) Before the First World War, film directors showed little interest in linking images with recorded sound.
- (F) The arrival of sound film technology in the United States forced smaller producers in the motion picture industry out of business.

### 参考答案与解析

1. 选 **B**。regard 尊重，视为，所以 B 的 consider 视为正确。
2. 选 **A**。以 most significant development 做关键词，虽然原文没有，但第一句有 the most important transformation 关键词意思相同。说从默片到有声电影是最重要的 development，所以 A 正确，其他答案都没说。
3. 选 **D**。paradox 矛盾，悖论，自相矛盾的话，所以 D 的 contradictions 矛盾正确。
4. 选 **C**。修辞目的题，先看所在的句子，说那时候的 spectator 会听到很多 aural presentation，紧接着就说 from 这个 to 那个，也就是说这两个东西都是 aural presentation，所以答案是 C。A 的 other forms of entertainment，B 的 recorded 和 D 的 change 都没说。
5. 选 **A**。以 Eisenstein 做关键词定位至最后一句，说在柏林，电影导演才第一次与一个作曲家合作，所以答案是 A。B 没说，原文只说柏林的演出带来了 international fame，没说之前 unpopular；C 的 first collaboration 没说；D 的一样重要没说。
6. 选 **A**。overshadow 遮阴，使失去色彩，所以 distract 困扰，使分心正确。
7. 选 **A**。EXCEPT 题，排除法。A 的 cost 定位至倒数第二句，但 high 和 low 是反的，所以 A 错，选；B 的 other technological innovation 定位至第一句，正确，不选；C 的 color 和 screen 定位至第二句，正确，不选；D 的 1950s 定位至最后一句话，正确，不选。
8. 选 **B**。原句的主干就是电影会 fade，就像什么什么一样。A 完全改变了原文，把 difficult 和后面的 critic 硬拼到一起；B 正确；C 把 fade 放在了 though 之后，而 though 之后的东西是与原文意思相反的，所以反了；D 错，不是在一战之前预测的。
9. 选 **A**。neglect 忽视，所以 A 的 fail 失败，没能怎样正确。这道题很简单，四个选项只有 fail 是负向的词，其他三个都是中性。
10. 选 **D**。以 technical problem 做关键词，原文没有，但原文有 technological inadequacies，与 technical problem 同义，读所在句，说这些 problem 会 occur again，也就是 D 说的没法 overcome，其他都没说。
11. 选 **B**。以 commercial radio programming 做关键词定位至第三句，说这些公司的合作和竞争创造了 industry，D 是个有点儿迷惑的选项，注意是公司之间的联系，不是电影业和公司的联系；C 没说；B 正确，公司的竞争和合作都是为了赚钱，所以 B 的 profitable 正确；A 的削弱竞争原文没说。
12. 选 **B**。以 Europe 做关键词定位至倒数第二句，问题问原因，那么句中 because 后的是答案，有声电影的成本对于小制片商太高，所以 B 正确。A 的 lack knowledge 原文没说；C 原文括号说可能已经 wired 了，所以 C 说反；D 原文没说。
13. 选 **B**。有一个 this research 做过渡已经够了，说明前面必须得有一个 research，而原文只有一个 research，所以 A 和 B 有可能，而代词 this 说明 research 必须得在前，所以 A 排除。
14. 选 **ABC**。A 选项对应原文第二段，正确；B 选项对应原文第三段第一句，正确；C 选项对应原文第五段开头句，正确；D 选项原文没说，不选；E 选项原文没说，不选；F 选项原文没说，不选。

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难度：易 / 中 / 难

错误：     个

**Water in the Desert**

Rainfall is not completely absent in desert areas, but it is highly variable. An annual rainfall of four inches is often used to define the limits of a desert. The impact of rainfall upon the surface water and groundwater resources of the desert is greatly influenced by landforms. Flats and depressions where water can collect are common features, but they make up only a small part of the landscape.

Arid lands, surprisingly, contain some of the world's largest river systems, such as the Murray-Darling in Australia, the Rio Grande in North America, the Indus in Asia, and the Nile in Africa. These rivers and river systems are known as "exogenous" because their sources lie outside the arid zone. They are vital for sustaining life in some of the driest parts of the world. For centuries, the annual floods of the Nile, Tigris, and Euphrates, for example, have brought fertile silts and water to the inhabitants of their lower valleys. Today, river discharges are increasingly controlled by human intervention, creating a need for international river-basin agreements. The filling of the Ataturk and other dams in Turkey has **drastically** reduced flows in the Euphrates, with potentially serious consequences for Syria and Iraq.

The flow of exogenous rivers varies with the season. The desert sections of long rivers respond several months after rain has fallen outside the desert, so that peak flows may be in the dry season. This is useful for irrigation, but the high temperatures, low humidities, and different day lengths of the dry season, compared to the normal growing season, can present difficulties with some crops.

Regularly flowing rivers and streams that originate within arid lands are known as "endogenous." These are generally fed by groundwater springs, and many issue from limestone massifs, such as the Atlas Mountains in Morocco. Basaltic rocks also support springs, notably at the Jabal Al-Arab on the Jordan-Syria border. ■ Endogenous rivers often do not reach the sea but drain into inland basins, where the water evaporates or is lost in the ground. ■ Most desert streambeds are normally dry, but they occasionally receive large flows of water and sediment. ■

Deserts contain large amounts of groundwater when compared to the amounts they hold in surface stores such as lakes and rivers. ■ But only a small fraction of groundwater enters the hydrological cycle—feeding the flows of streams, maintaining lake levels, and being recharged (or refilled) through surface flows and rainwater. In recent years, groundwater has become an increasingly important source of freshwater for desert **dwellers**. The United Nations Environment Programme and the World Bank have funded attempts to survey the groundwater resources of arid lands and to develop appropriate extraction techniques. Such programs are much needed because in many arid lands there is only a vague idea of the extent of groundwater resources. It is known, however, that the distribution of groundwater is uneven, and that much of it lies at great depths.

Groundwater is stored in the pore spaces and joints of rocks and unconsolidated (unsolidified) sediments or in the openings widened through **fractures** and weathering. The water-saturated rock or sediment is known as an "aquifer." Because they are porous, sedimentary rocks, such as sandstones and conglomerates, are important potential sources of groundwater. Large quantities of water may also be stored in limestones when joints and cracks have been enlarged to form cavities. Most limestone and sandstone aquifers are deep and extensive but may contain groundwaters that are not being recharged. Most shallow aquifers in sand and gravel deposits produce lower yields, but they can be rapidly recharged. Some deep aquifers are known as "fossil waters." The term "fossil" describes water that has been present for several thousand years. These aquifers became saturated more than 10,000 years ago and are no longer being recharged.

Water does not remain **immobile** in an aquifer but can seep out at springs or leak into other aquifers. The rate of movement may be very slow: in the Indus plain, the movement of saline (salty) groundwaters has still not reached equilibrium after 70 years of being tapped. The mineral content of groundwater normally increases with the depth, but even quite shallow aquifers can be highly saline.

1. Which of the following statements about annual rainfall can be inferred from paragraph 1?
  - (A) Flat desert areas receive more annual rainfall than desert areas with mountains.
  - (B) Areas that receive more than four inches of rain per year are not considered deserts.
  - (C) Many areas receive less than four inches of annual rainfall, but only a few are deserts.
  - (D) Annual rainfall has no impact on the groundwater resources of desert areas.
2. The word “drastically” in the passage is closest in meaning to
  - (A) obviously
  - (B) unfortunately
  - (C) rapidly
  - (D) severely
3. In paragraph 2, why does the author mention the Atatürk and other dams in Turkey?
  - (A) To contrast the Euphrates River with other exogenous rivers
  - (B) To illustrate the technological advances in dam building
  - (C) To argue that dams should not be built on the Euphrates River
  - (D) To support the idea that international river-basin agreements are needed
4. According to paragraph 2, which of the following is true of the Nile River?
  - (A) The Nile’s flow in its desert sections is at its lowest during the dry season
  - (B) The Nile’s sources are located in one of the most arid zones of the world
  - (C) The Nile’s annual floods bring fertile silts and water to its lower valley
  - (D) The Nile’s periodic flooding hinders the growth of some crops
5. The word “dwellers” in the passage is closest in meaning to
  - (A) settlements
  - (B) farmers
  - (C) tribes
  - (D) inhabitants
6. Paragraph 5 supports all of the following statements about the groundwater in deserts EXCEPT
  - (A) The groundwater is consistently found just below the surface
  - (B) A small part of the groundwater helps maintain lake levels
  - (C) Most of the groundwater is not recharged through surface water
  - (D) The groundwater is increasingly used as a source of freshwater
7. The word “fractures” in the passage is closest in meaning to
  - (A) streams
  - (B) cracks
  - (C) storms
  - (D) earthquakes
8. According to paragraph 6, which of the following statements about aquifers in deserts is true?
  - (A) Water from limestone and sandstone aquifers is generally better to drink than water from sand and gravel aquifers
  - (B) Sand and gravel aquifers tend to contain less groundwater than limestone or sandstone aquifers
  - (C) Groundwater in deep aquifers is more likely to be recharged than groundwater in shallow aquifers
  - (D) Sedimentary rocks, because they are porous, are not capable of storing large amounts of groundwater
9. According to paragraph 6, the aquifers called fossil waters
  - (A) contain fossils that are thousands of years old
  - (B) took more than 10,000 years to become saturated with water
  - (C) have not gained or lost any water for thousands of years
  - (D) have been collecting water for the past 10,000 years
10. The word “immobile” in the passage is closest in meaning to
  - (A) enclosed
  - (B) permanent
  - (C) motionless
  - (D) intact
11. The passage supports which of the following statements about water in the desert?

- (A) The most visible forms of water are not the most widespread forms of water in the desert.
- (B) Groundwater in the desert cannot become a source of drinking water but can be used for irrigation.
- (C) Most of the water in the desert is contained in shallow aquifers that are being rapidly recharged.
- (D) Desert areas that lack endogenous or exogenous rivers and streams cannot support life.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

These sudden floods provide important water supplies but can also be highly destructive.

**Where would the sentence best fit?**

**13. Directions: Select from the seven sentences below, the two sentences that correctly characterize endogenous rivers and the three sentences that correctly characterize exogenous rivers. Drag each sentence you select into the appropriate column of the table. Two of the sentences will NOT be used. This question is worth 3 points.**

Endogenous Rivers (TWO):
Exogenous Rivers (THREE):

**Answer choices**

- (A) Their water generally comes from groundwater springs.
- (B) Their water is saltier than the water of most other rivers.
- (C) They include some of the world's largest rivers.
- (D) They originate outside the desert.
- (E) They often drain into inland basins and do not reach the sea.
- (F) They contain too much silt to be useful for irrigation.
- (G) Their water flow generally varies with the season of the year.

**笔记区**

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## 参考答案与解析

1. 选 **B**。以 annual rainfall 定位至第二句，说年降雨量少于 4 inch 的地方被认为是沙漠，推断出相反的一面是年降雨量大于 4 inch 的地方不是沙漠，也就是 B。
2. 选 **D**。drastically 剧烈地，所以 D 的 severely 正确。本句说土耳其建大坝怎么样减少了幼发拉底河的水量，可能给叙利亚和伊拉克带来严重后果，如果只是 A 明显减少程度不够；B 快速和 C 的 unfortunately 都没有信息。
3. 选 **D**。修辞目的题，两个细节所在的句子只是单纯的说了个例子，往前看，说河水流量越来越多地被人控制，使得需要有一个 agreement，所以答案是 D，需要 agreement。
4. 选 **C**。以 Nile 做关键词定位至第一句和第四句，第一句中尼罗河只是个例子，所以答案在第四句，说尼罗河泛滥给 valley 带去 silt 和 water，与 C 完全一样，所以答案是 C。
5. 选 **D**。dweller 是居民之意，inhabitants 正确。原句说地下水已经成为沙漠的什么的越来越重要的水源，人才需要水，而且 er 结尾的本身就表示人，A 错；tribe 和 farmers 虽然都是人，但原文没有关于沙漠上的人是做什么的信息，所以都不选。
6. 选 **A**。EXCEPT 题，排除法。A 在原文中没有对应，错，选；B 的 lake level 做关键词定位至第二句，small fraction 与 small part 同义替换，正确，不选；C 的 surface water 与第二句的 surface flow 同义替换，正确，不选；D 的 freshwater 做关键词定位至第三句，正确，不选。
7. 选 **B**。fracture 断裂，裂隙，裂缝，所以 crack 正确。原句说地下水储藏于岩石孔隙和岩石结合处或者未固结的沉积物中，而且说 opening 会通过什么和风化进一步变宽，河流地震和风暴都不靠谱，前面说 opening，所以答案是 crack。
8. 选 **B**。此题用 aquifer 做关键词定位的话可能需要读较多文章，使用排除法较快。A 的 limestone 做关键词定位至第五句，但这句完全没说 drink 的事儿，所以 A 错；B 的 sand and gravel 做关键词定位至倒数第四句，说 sand and aquifer 的产水量低，但更容易 recharge，前句说到 limestone 和 sandstone，说明高的是这两种，所以 B 正确，同时 C 说反；D 的 sedimentary rocks 做关键词定位至第三句，应该是能储存，选项说反，错。
9. 选 **C**。以 fossil waters 定位至倒数三句，说含有 fossil water 的含水层早在千年之前就 saturated，不在 recharge 了，所以答案是 C；这句话说 10000 年前就 saturated 了，所以 B 的一万年才变 saturated 和 D 的聚集了一万年的水都不对；A 完全不靠谱。
10. 选 **C**。immobile 不动，所以 C 的 motionless 正确。原句说水不是怎么样，而是通过泉水或者渗漏到其他含水层的方式渗出，也就是说水会流动，也就是不是不动；而且 im 有“不”的意思，mobile 移动；A 包围 B 永恒不变 D 完整未受伤害都不对。
11. 选 **A**。问整个 passage，所以排除法最好，而且应该关注各段的开头。A 的信息在第五段的开头，说沙漠的水量比河流和湖泊大，而河流和湖泊是最常见的水存在的形式，但却不是最多的，所以 A 正确；B 错，原文第三段说到能够灌溉，但没说不能喝，错；C 的 rapidly recharged 明显和第六段第五句不 recharge 相反；D 原文没说。
12. 选 **C**。三个过渡点，分别是代词 these，名词 water supplies 和名词 flood，flood 与原文第四段最后一句的 large flows of water 是同义词，所以 B 或者 C 可能对，但 these 能够确定 C 对，因为 these flood 之前必须有说到 flood 的，刚好前面的 large flows of water 满足要求。
13. 选 Endogenous Rivers 选 **AE**；Exogenous Rivers 选 **CDG**。第二段第二句说到 exogenous，第四段说到 endogenous。第二段第一句说到最大的河流，对应 C 选项；而这段的第二句说这些河流源自干旱区之外，对应 D 选项；第三段的开头对应 G 选项；这三个是 exogenous 的答案。第四段的第二句和第四句分别对应 A 选项和 E 选项，这两个是 endogenous 的答案。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Biological Clocks

Survival and successful reproduction usually require the activities of animals to be coordinated with predictable events around them. Consequently, the timing and rhythms of biological functions must closely match periodic events like the solar day, the tides, the lunar cycle, and the seasons. The relations between animal activity and these periods, particularly for the daily rhythms, have been of such interest and importance that a huge amount of work has been done on them and the special research field of chronobiology has emerged. Normally, the constantly changing levels of an animal's activity—sleeping, feeding, moving, reproducing, metabolizing, and producing enzymes and hormones, for example—are well coordinated with environmental rhythms, but the key question is whether the animal's schedule is driven by external cues, such as sunrise or sunset, or is instead dependent somehow on internal timers that themselves generate the observed biological rhythms. Almost universally, biologists accept the idea that all eukaryotes (a category that includes most organisms except bacteria and certain algae) have internal clocks. By isolating organisms completely from external periodic cues, biologists learned that organisms have internal clocks. For instance, apparently normal daily periods of biological activity were maintained for about a week by the fungus *Neurospora* when it was intentionally isolated from all geophysical timing cues while orbiting in a space shuttle. The continuation of biological rhythms in an organism without external cues attests to its having an internal clock.

When crayfish are kept continuously in the dark, even for four to five months, their compound eyes continue to adjust on a daily schedule for daytime and nighttime vision. Horseshoe crabs kept in the dark continuously for a year were found to maintain a persistent rhythm of brain activity that similarly adapts their eyes on a daily schedule for bright or for weak light. Like almost all daily cycles of animals deprived of environmental cues, those measured for the horseshoe crabs in these conditions were not exactly 24 hours. Such a rhythm whose period is approximately—but not exactly—a day is called circadian. For different individual horseshoe crabs, the circadian period ranged from 22.2 to 25.5 hours. A particular animal typically maintains its own characteristic cycle duration with great precision for many days. **Indeed, stability of the biological clock's period is one of its major features, even when the organism's environment is subjected to considerable changes in factors, such as temperature, that would be expected to affect biological activity strongly.** Further evidence for persistent internal rhythms appears when the usual external cycles are shifted—either experimentally or by rapid east-west travel over great distances. Typically, the animal's daily internally generated cycle of activity continues without change. As a result, its activities are shifted relative to the external cycle of the new environment. The disorienting effects of this mismatch between external time cues and internal schedules may persist, like our jet lag, for several days or weeks until certain cues such as the daylight/darkness cycle reset the organism's clock to synchronize with the daily rhythm of the new environment.

Animals need natural periodic signals like sunrise to maintain a cycle whose period is precisely 24 hours. ■ Such an external cue not only coordinates an animal's daily rhythms with particular features of the local solar day but also—because it normally does so day after day—seems to keep the internal clock's period close to that of Earth's rotation. ■ Yet despite this synchronization of the period of the internal cycle, the animal's timer itself continues to have its own genetically built-in period close to, but different from, 24 hours. ■ Without the external cue, the difference accumulates and so the internally regulated activities of the biological day drift continuously, like the tides, in relation to the solar day. ■ This drift has been studied extensively in many animals and in biological activities ranging from the hatching of fruit fly eggs to wheel running by squirrels. Light has a predominating influence in setting the clock. Even a fifteen-minute burst of light in otherwise sustained darkness can reset an animal's circadian rhythm. Normally, internal rhythms are kept in step by regular environmental cycles. For instance, if a homing pigeon is to navigate with its Sun compass, its clock must be properly set by cues provided by the daylight/darkness cycle.

1. The word “**Consequently**” in the passage is closest in meaning to
  - (A) Therefore
  - (B) Additionally
  - (C) Nevertheless
  - (D) Moreover
2. In paragraph 1, the experiment on the fungus *Neurospora* is mentioned to illustrate
  - (A) the existence of weekly periods of activity as well as daily ones
  - (B) the finding of evidence that organisms have internal clocks
  - (C) the effect of space on the internal clocks of organisms
  - (D) the isolation of one part of an organism’s cycle for study
3. According to paragraph 1, all the following are generally assumed to be true EXCEPT
  - (A) It is important for animals’ daily activities to be coordinated with recurring events in their environment.
  - (B) Eukaryotes have internal clocks.
  - (C) The relationship between biological function and environmental cycles is a topic of intense research.
  - (D) Animals’ daily rhythms are more dependent on external cues than on internal clocks.
4. The word “**persistent**” in the passage is closest in meaning to
  - (A) adjusted
  - (B) strong
  - (C) enduring
  - (D) predicted
5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Stability, a feature of the biological clock’s period, depends on changeable factors such as temperature.
  - (B) A major feature of the biological clock is that its period does not change despite significant changes in the environment.
  - (C) A factor such as temperature is an important feature in the establishment of the biological clock’s period.
  - (D) Biological activity is not strongly affected by changes in temperature.
6. According to paragraph 2, which of the following is true about the circadian periods of animals deprived of environmental cues?
  - (A) They have the same length as the daily activity cycles of animals that are not deprived of such cues.
  - (B) They can vary significantly from day to day.
  - (C) They are not the same for all members of a single species.
  - (D) They become longer over time.
7. According to paragraph 2, what will an animal experience when its internal rhythms no longer correspond with the daily cycle of the environment?
  - (A) Disorientation
  - (B) Change in period of the internal rhythms
  - (C) Reversal of day and night activities increased
  - (D) Sensitivity to environmental factors
8. In paragraph 2, the author provides evidence for the role of biological clocks by
  - (A) listing the daily activities of an animal’s cycle: sleeping, feeding, moving, reproducing, metabolizing, and producing enzymes and hormones
  - (B) describing the process of establishing the period of a biological clock
  - (C) presenting cases in which an animal’s daily schedule remained stable despite lack of environmental cues
  - (D) contrasting animals whose daily schedules fluctuate with those of animals whose schedules are constant
9. The word “**duration**” in the passage is closest in meaning to
  - (A) length

- (B) feature
- (C) process
- (D) repetition

**10. In paragraph 2, why does the author mention that the period for different horseshoe crabs ranges from 22.2 to 25.5 hours?**

- (A) To illustrate that an animal's internal clock seldom has a 24-hour cycle
- (B) To argue that different horseshoe crabs will shift from daytime to nighttime vision at different times
- (C) To illustrate the approximate range of the circadian rhythm of all animals
- (D) To support the idea that external cues are the only factors affecting an animal's periodic behavior

**11. The word "it" in the passage refers to**

- (A) an external cue such as sunrise
- (B) the daily rhythm of an animal
- (C) the local solar day
- (D) a cycle whose period is precisely 24 hours

**12. The word "sustained" in the passage is closest in meaning to**

- (A) intense
- (B) uninterrupted
- (C) natural
- (D) periodic

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Because the internal signals that regulate waking and going to sleep tend to align themselves with these external cues, the external clock appears to dominate the internal clock.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The activity of animals is usually coordinated with periodically recurring events in the environment.

**Answer choices**

- (A) Most animals survive and reproduce successfully without coordinating their activities to external environmental rhythms.
- (B) The circadian period of an animal's internal clock is genetically determined and basically unchangeable.
- (C) Environmental cues such as a change in temperature are enough to reset an animal's clock.
- (D) Animals have internal clocks that influence their activities even when environmental cues are absent.
- (E) Animals are less affected by large differences between their internal rhythms and the local solar day than are humans.
- (F) Because an animal's internal clock does not operate on a 24-hour cycle, environmental stimuli are needed to keep the biological day aligned with the solar day.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **A**。consequently 因此，therefore 正确。
2. 选 **B**。修辞目的题，N 所在的这句话就是一个例子，而且这句话一开始就有一个 for example，说明这句话是前一句话的例子，往前看，把生物同外部条件完全隔绝之后我们就可以发现生物的内部节律，所以答案是 B。
3. 选 **D**。EXCEPT 题，排除法。A 的 activities 和 coordinate 做关键词定位至第一句，正确，不选；B 的 E 做关键词定位至倒数第四句，明确指出有 internal，所以正确，不选；C 的 intense research 做关键词定位至第三句，正确，不选；D 的比较原文没说，错，选。
4. 选 **C**。persistent 持续的，所以 enduring 正确。
5. 选 **B**。原句的结构就是稳定性是怎麼样的，即使怎么怎么样，B 与之完全一致，是正确答案。A 的 depend 纯属编造；C 和 D 都完全改变了原文的主干，错。
6. 选 **C**。以 circadian 做关键词定位至第四句，因为这句话一开始就是一个 such，说明可能和上句有联系，读下这两句，说如果没有 environmental cue，那么马蹄蟹的 period 就不是 24 小时，这个 24 小时就叫 circadian，接着文章又说可能是 22.2 to 25.5 小时，所以答案是 C，同物种的 circadian 也不一样。此题易错选 A，因为前文特别强调没有外部环境因素的时候 circadian 不是 24 小时，所以不 same，A 错。
7. 选 **A**。以 cycle of the environment 做关键词定位至倒数第二句，这句之前说生物的内部节律不变，接着说生物的活动不得不因为新环境而发生改变，然后就出现了 mismatch，后句中的 disorientation 就是正确答案。B 与原文相反，C 和 D 没说。
8. 选 **C**。问作者是怎么给出 biological clock 的作用的，不好定位找答案，使用排除法。A 说列出了动物的周期性活动，只是单纯列出活动无法起到说明生物钟的作用，太肤浅，不对；原文没有描述生物钟的形成，B 错；C 对应原文倒数第五句（句子简化题那句话），说没有外部环境条件生物钟仍然可以起作用，说明生物钟起的作用重要，不依靠其他，所以 C 是答案；D 的两者对比原文没说，不选。
9. 选 **A**。duration 时长，所以 A 的 length 正确。
10. 选 **A**。修辞目的题，先看下数字所在的这句，说不同的马蹄蟹的 circadian 在 22.2 到 25.5 小时之间，明显只是个例子。前一句说像这种大致 24 小时却不是准确的 24 小时的节律叫做 circadian，也就是说后面这句说的就是 circadian 不是准确的 24 小时的一个例子，所以答案是 A。B 的 shift from daytime to nighttime 没说；C 和 D 都太绝对而且原文没说。
11. 选 **A**。指代题，往前找，找名词，因为有 but also，前面就一定有 not only，而且 not only 与 but also 共用同一主语，所以 not only 之前的主语就是这道题的答案 A。
12. 选 **B**。sustained 就是维持的，连续的，所以 B 没被打断的，连续的正确。
13. 选 **B**。两个过渡点，代词 these 说明正确插入点之前必须有后面的名词 external cues，所以 B 和 D 有可能是答案，但 D 之后的 this drift 与前文的 drift 衔接紧密，排除，所以答案是 B。而且待插入句说 internal dominate external，紧接着 B 之后说 this synchronization，这种同步与待插入句对应，也说明 B 正确。
14. 选 **BDF**。A 选项与原文第一段最后一句说反，原文的意思是生物无论外界条件存在与否都存在节律证明生物钟的存在，不选；B 选项对应原文第二段第四句，正确，注意这段比较特殊，中心句不在前面也不在后面在中间；C 选项与原文第二段的第七句说的内容相反，不选；D 选项对应原文第二段，正确；E 选项原文没说，不选；F 选项对应原文第三段第一句，正确。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Types of Social Groups**

Life places us in a **complex** web of relationships with other people. Our humanness arises out of these relationships in the course of social interaction. Moreover, our humanness must be sustained through social interaction—and fairly constantly so. When an association continues long enough for two people to become linked together by a relatively stable set of expectations, it is called a relationship.

People are bound within relationships by two types of bonds: expressive ties and instrumental ties. Expressive ties are social links formed when we emotionally invest ourselves in and commit ourselves to other people. Through association with people who are meaningful to us, we achieve a sense of security, love, acceptance, companionship, and personal worth. Instrumental ties are social links formed when we cooperate with other people to achieve some goal. Occasionally, this may mean working with instead of against competitors. More often, we simply cooperate with others to reach some end without **endowing** the relationship with any larger significance.

Sociologists have built on the distinction between expressive and instrumental ties to distinguish between two types of groups: primary and secondary. A primary group involves two or more people who enjoy a direct, intimate, cohesive relationship with one another. Expressive ties predominate in primary groups; we view the people as ends in themselves and valuable in their own right. A secondary group entails two or more people who are involved in an impersonal relationship and have come together for a specific, practical purpose. Instrumental ties predominate in secondary groups; we perceive people as means to ends rather than as ends in their own right. Sometimes primary group relationships evolve out of secondary group relationships. This happens in many work settings. People on the job often develop close relationships with coworkers as they come to share gripes, jokes, gossip, and satisfactions.

A number of conditions enhance the likelihood that primary groups will arise. First, group size is important. We find it difficult to get to know people personally when they are milling about and dispersed in large groups. In small groups we have a better chance to initiate contact and establish rapport with them. Second, face-to-face contact allows us to **size up** others. Seeing and talking with one another in close physical proximity makes possible a subtle exchange of ideas and feelings. And third, the probability that we will develop primary group bonds increases as we have frequent and continuous contact. Our ties with people often deepen as we interact with them across time and gradually evolve interlocking habits and interests.

Primary groups are fundamental to us and to society. First, primary groups are critical to the socialization process. Within them, infants and children are introduced to the ways of their society. Such groups are the breeding grounds in which we acquire the norms and values that equip us for social life. **Sociologists view primary groups as bridges between individuals and the larger society because they transmit, mediate, and interpret a society's cultural patterns and provide the sense of oneness so critical for social solidarity.**

Second, primary groups are fundamental because they provide the settings in which we meet most of our personal needs. ■ Within them, we experience companionship, love, security, and an overall sense of well-being. ■ Not surprisingly, sociologists find that the strength of a group's primary ties has implications for the group's functioning. ■ For example, the stronger the primary group ties of a sports team playing together, the better their record is. ■

Third, primary groups are fundamental because they serve as powerful instruments for social control. Their members command and dispense many of the rewards that are so vital to us and that make our lives seem worthwhile. Should the use of rewards fail, members can frequently win by rejecting or threatening to ostracize those who **deviate** from the primary group's norms. For instance, some social groups employ shunning (a person can remain in the community, but others are forbidden to interact with the person) as a device to bring into line individuals whose behavior goes beyond that allowed by the particular group. Even more important, primary groups define social reality for us by structuring our experiences. By providing us with definitions of situations, they elicit from our behavior that conforms to group-devised meanings. Primary groups, then, serve both as carriers of social norms and as enforcers of them.

1. The word “**complex**” in the passage is closest in meaning to
  - (A) delicate
  - (B) elaborate
  - (C) private
  - (D) common
2. According to paragraph 1, which of the following is true of a relationship?
  - (A) It is a structure of associations with many people.
  - (B) It should be studied in the course of a social interaction.
  - (C) It places great demands on people.
  - (D) It develops gradually overtime.
3. The word “**endowing**” in the passage is closest in meaning to
  - (A) leaving
  - (B) exposing
  - (C) providing
  - (D) understanding
4. Which of the following can be inferred about instrumental ties from the author’s mention of working with competitors in paragraph 2?
  - (A) Instrumental ties can develop even in situations in which people would normally not cooperate.
  - (B) Instrumental ties require as much emotional investment as expressive ties.
  - (C) Instrumental ties involve security, love, and acceptance.
  - (D) Instrumental ties should be expected to be significant.
5. According to paragraph 3, what do sociologists see as the main difference between primary and secondary groups?
  - (A) Primary groups consist of people working together, while secondary groups exist outside of work settings.
  - (B) In primary groups people are seen as means, while in secondary groups people are seen as ends.
  - (C) Primary groups involve personal relationships, while secondary groups are mainly practical in purpose.
  - (D) Primary groups are generally small, while secondary groups often contain more than two people.
6. Which of the following can be inferred from the author’s claim in paragraph 3 that primary group relationships sometimes evolve out of secondary group relationships?
  - (A) Secondary group relationships begin by being primary group relationships.
  - (B) A secondary group relationship that is highly visible quickly becomes a primary group relationship.
  - (C) Sociologists believe that only primary group relationships are important to society.
  - (D) Even in secondary groups, frequent communication serves to bring people into close relationships.
7. The phrase “**size up**” in the passage is closest in meaning to
  - (A) enlarge
  - (B) evaluate
  - (C) impress
  - (D) accept
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Sociologists think that cultural patterns establish connections between the individual and the larger society.
  - (B) Sociologists believe that individuals with a sense of oneness bridge the gap between society and primary groups.
  - (C) Sociologists think primary groups contribute to social solidarity because they help maintain a society’s cultural patterns.
  - (D) Sociologists believe that the cultural patterns that provide social solidarity arise as bridges from primary groups.
9. This passage is developed primarily by
  - (A) drawing comparisons between theory and practice

- (B) presenting two opposing theories
- (C) defining important concepts and providing examples of them
- (D) discussing causes and their effects

**10. The word “deviate” in the passage is closest in meaning to**

- (A) detract
- (B) advance
- (C) select
- (D) depart

**11. According to paragraph 7, why would a social group use shunning?**

- (A) To enforce practice of the kinds of behavior acceptable to the group
- (B) To discourage offending individuals from remaining in the group
- (C) To commend and reward the behavior of the other members of the group
- (D) To decide which behavioral norms should be passed on to the next generation

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

People who do not live alone, for example, tend to make healthier life choices and develop fewer pathologies than people who live by themselves.

**Where would the sentence best fit?**

**13. Directions: Complete the table below by selecting three answer choices that are characteristics of primary groups and two answer choices that are characteristics of secondary groups. This question is worth 3 points.**

Primary Groups (THREE):
Secondary Groups (TWO):

**Answer choices**

- (A) Developing socially acceptable behavior
- (B) Working together against competitors
- (C) Experiencing pressure from outside forces
- (D) Viewing people as a means to an end
- (E) Existing for practical purposes
- (F) Providing meaning for life situations
- (G) Involving close relationships

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。complex 复杂的，所以 elaborate 正确。
2. 选 **D**。以 relationship 定位至最后一句，注意 relationships 不能做关键词，因为多次重复出现。原句说当这种 association 持续的时间足够长的时候，以至于两个人之间已经形成了稳定的 expectation，就叫 relationship，所以 D 说随时间 develop 正确。A 的 many people，B 的 study，C 的 demand 都没说。
3. 选 **C**。endow 赋予，所以 provide 提供正确。
4. 选 **A**。以 competitor 定位至倒数第二句，说偶尔这意味着与竞争对手合作而非竞争，而这个 this 意味着这句话跟前一句有联系。前一句说 instrumental ties 是我们在与别人合作达到某种目的的时候形成的，这与 A 说的通常不合作的人也有形成 instrumental 完全一样。B 没说，C 与原文的第三句说反，D 与原文最后一句说反。
5. 选 **C**。分别以 primary group 和 secondary group 做关键词定位至第二句和第四句，分别说了两个 group，primary 的是比较亲密的，secondary 是因为事先某种共同的目的才形成的，所以答案是 C。A 错，不是用 work 来区分这两个 group 的；两者同样不是以人数区分的，所以 D 错；C 的 end 不 end 是原文在后面才说的，也不能区分这两个 group。
6. 选 **D**。以 evolve out of 定位至倒数第三句，但这句话跟问题几乎是完全一样的，所以不是答案。往后看，this 标示着上下句之间有联系。下句说这种 evolve 发生在工作背景下，接着说同事之间可以通过 share 变成非常亲密的朋友，也就是 secondary 变 primary 的一个例子，所以正确答案是 D。A 说反；B 和 C 均没说而且 C 有违常识。
7. 选 **B**。size up 估量，估计，所以是 evaluate。
8. 选 **C**。原文的结构是 sociologist 把 primary group 看成 blabla，因为 blabla。只有 C 表达了原因，A 缺了原文的很多信息，错；B 和 D 都缺失了原文很重要的 because 部分，所以都是错的。
9. 选 **C**。问本文的组织结构，问全文的题应该多关注各段的开头。原文首先提出了两个关系，然后又说 expressive tie 和 instrumental tie，最后又说了 primary group 产生的条件。叙述两类关系用的笔墨明显不等，所以不是对比，B 不对；A 的理论和实践原文完全没说，而且也说到对比，也不对；D 的因果是原文完全没说的。作者定义了两个 group 和两个 tie，所以 C 说定义概念是对的，而且作者在定义概念之后都有解释，C 正确。
10. 选 **D**。deviate 偏离，所以答案是 depart。
11. 选 **A**。以 shunning 定位至第四句，说人们会用 shunning 把离经叛道的人弄回来，但没给出原因。这句中的 for example 说明是上句的例子，前面一句说如果奖励不行，我们就排斥那些不守规矩的人，所以一切都是为了强化规则，答案是 A。B 说不鼓励冒犯 group 当中的人，原文没说冒犯人；C 的 reward 和 D 的 next generation 都没说。
12. 选 **B**。两个过渡点，分别是连词 for example 和名词 healthier life choices，根据 for example 排除 C 和 D，因为原文也有 for example，而正常说话的时候两个 for example 是不连续使用的；而且根据 healthier life choices 跟原文中 sense of well-being 的同义替换也可以确定是 A 或者 B，但 A 点后的 them 与前文衔接紧密，所以答案是 B。
13. Primary Groups 选 **AFG**；Secondary Groups 选 **DE**。此题不典型，因为作者用了文章的第四到七段较大篇幅讲 primary，却只用了第二和第三段的部分讲到 secondary，而且本文对于两个 group 的叙述存在交叉，交叉的部分主要在二三两段，但这两段的叙述也是先 primary 后 secondary，所以顺序性还是有的。第三段的四五两句分别对应 E 和 D 两个答案，所以这两个答案属于 secondary；第二段和第三段的第三句对应 F 选项，第三段第二句对应 G 选项，最后一段的第三句和第四句对应 A 选项，结合 11 题的答案很容易选出这项。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Methods of Studying Infant Perception**

In the study of perceptual abilities of infants, a number of techniques are used to determine infants' responses to various stimuli. Because they cannot verbalize or fill out questionnaires, indirect techniques of naturalistic observation are used as the primary means of determining what infants can see, hear, feel, and so forth. Each of these methods compares an infant's state prior to the introduction of a stimulus with its state during or immediately following the stimulus. The difference between the two measures provides the researcher with an indication of the level and duration of the response to the stimulus. For example, if a uniformly moving pattern of some sort is passed across the visual field of a neonate (newborn), repetitive following movements of the eye occur. The occurrence of these eye movements provides evidence that the moving pattern is perceived at some level by the newborn. Similarly, changes in the infant's general level of motor activity—turning the head, blinking the eyes, crying, and so forth—have been used by researchers as visual indicators of the infant's perceptual abilities.

Such techniques, however, have limitations. First, the observation may be unreliable in that two or more observers may not agree that the particular response occurred, or to what degree it occurred. Second, responses are difficult to quantify. Often the rapid and diffuse movements of the infant make it difficult to get an accurate record of the number of responses. The third, and most potent, limitation is that it is not possible to be certain that the infant's response was due to the stimulus presented or to a change from no stimulus to a stimulus. The infant may be responding to aspects of the stimulus different than those identified by the investigator. **Therefore, when observational assessment is used as a technique for studying infant perceptual abilities, care must be taken not to overgeneralize from the data or to rely on one or two studies as conclusive evidence of a particular perceptual ability of the infant.**

Observational assessment techniques have become much more sophisticated, reducing the limitations just presented. Film analysis of the infant's responses, heart and respiration rate monitors, and nonnutritive sucking devices are used as effective tools in understanding infant perception. ■ Film analysis permits researchers to carefully study the infant's responses over and over and in slow motion. ■ Precise measurements can be made of the length and frequency of the infant's attention between two stimuli. ■ Heart and respiration monitors provide the investigator with the number of heartbeats or breaths taken when a new stimulus is presented. ■ Numerical increases are used as quantifiable indicators of heightened interest in the new stimulus. Increases in nonnutritive sucking were first used as an assessment measure by researchers in 1969. They devised an apparatus that connected a baby's pacifier to a counting device. As stimuli were presented, changes in the infant's sucking behavior were recorded. Increases in the number of sucks were used as an indicator of the infant's attention to or preference for a given visual display.

Two additional techniques of studying infant perception have come into vogue. The first is the habituation-dishabituation technique, in which a single stimulus is presented repeatedly to the infant until there is a measurable decline (habituation) in whatever attending behavior is being observed. At that point a new stimulus is presented, and any recovery (dishabituation) in responsiveness is recorded. If the infant fails to dishabituate and continues to show habituation with the new stimulus, it is assumed that the baby is unable to perceive the new stimulus as different. The habituation-dishabituation paradigm has been used most extensively with studies of auditory and olfactory perception in infants. The second technique relies on evoked potentials, which are electrical brain responses that may be related to a particular stimulus because of where they originate. Changes in the electrical pattern of the brain indicate that the stimulus is getting through to the infant's central nervous system and eliciting some form of response.

Each of the preceding techniques provides the researcher with evidence that the infant can detect or discriminate between stimuli. With these sophisticated observational assessment and electro-physiological measures, we know that the neonate of only a few days is far more perceptive than previously suspected. However, these measures are only "indirect" indicators of the infant's perceptual abilities.

1. **Paragraph 1 indicates that researchers use indirect methods primarily to observe the**
  - (A) range of motor activity in neonates
  - (B) frequency and duration of various stimuli
  - (C) change in an infant's state following the introduction of a stimulus
  - (D) range of an infant's visual field
2. **The word "uniformly" in the passage is closest in meaning to**
  - (A) clearly
  - (B) quickly
  - (C) consistently
  - (D) occasionally
3. **Why does the author mention "repetitive following movements of the eye"?**
  - (A) To identify a response that indicates a neonate's perception of a stimulus
  - (B) To explain why a neonate is capable of responding to stimuli only through repetitive movements
  - (C) To argue that motor activity in a neonate may be random and unrelated to stimuli
  - (D) To emphasize that responses to stimuli vary in infants according to age
4. **Which of the following is NOT mentioned in paragraph 2 as a problem in using the technique of direct observation?**
  - (A) It is impossible to be certain of the actual cause of an infant's response.
  - (B) Infants' responses, which occur quickly and diffusely, are often difficult to measure.
  - (C) Infants do not respond well to stimuli presented in an unnatural laboratory setting.
  - (D) It may be difficult for observers to agree on the presence or the degree of a response.
5. **The word "potent" in the passage is closest in meaning to**
  - (A) artificial
  - (B) powerful
  - (C) common
  - (D) similar
6. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Researchers using observational assessment techniques on infants must not overgeneralize and must base their conclusions on data from many studies.
  - (B) On the basis of the data from one or two studies, it seems that some infants develop a particular perceptual ability not observed in others.
  - (C) To use data from one or two studies on infant's perceptual abilities, it is necessary to use techniques that will provide conclusive evidence.
  - (D) When researchers fail to make generalizations from their studies, their observed data is often inconclusive.
7. **What is the author's primary purpose in paragraph 3?**
  - (A) To explain why researchers must conduct more than one type of study when they are attempting to understand infant perception
  - (B) To describe new techniques for observing infant perception that overcome problems identified in the previous paragraph
  - (C) To present and evaluate the conclusions of various studies on infant perception
  - (D) To point out the strengths and weaknesses of three new methods for quantifying an infant's reaction to stimuli
8. **The word "quantifiable" in the passage is closest in meaning to**
  - (A) visual
  - (B) permanent
  - (C) meaningful
  - (D) measurable
9. **Paragraph 3 mentions all of the following as indications of an infant's heightened interest in a new stimulus EXCEPT an increase in**

- (A) sucking behavior
- (B) heart rate
- (C) the number of breaths taken
- (D) eye movements

**10. According to paragraph 4, which of the following leads to the conclusion that infants are able to differentiate between stimuli in a habituation-dishabituation study?**

- (A) Dishabituation occurs with the introduction of a new stimulus.
- (B) Electrical responses in the infant's brain decline with each new stimulus.
- (C) Habituation is continued with the introduction of a new stimulus.
- (D) The infant displays little change in electrical brain responses.

**11. In paragraph 4, what does the author suggest about the way an infant's brain perceives stimuli?**

- (A) An infant's potential to respond to a stimulus may be related to the size of its brain.
- (B) Changes in the electrical patterns of an infant's brain are difficult to detect.
- (C) Different areas of an infant's brain respond to different types of stimuli.
- (D) An infant is unable to perceive more than one stimulus at a time.

**12. Paragraph 5 indicates that researchers who used the techniques described in the passage discovered that**

- (A) infants find it difficult to perceive some types of stimuli
- (B) neonates of only a few days cannot yet discriminate between stimuli
- (C) observational assessment is less useful for studying infant perception than researchers previously believed
- (D) a neonate is able to perceive stimuli better than researchers once thought

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The repetition allows researchers to observe the infant's behavior until they reach agreement about the presence and the degree of the infant's response.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Researchers use a number of techniques to determine how infants respond to changes in their environment.

**Answer choices**

- (A) Data from observational methods must be confirmed through multiple studies.
- (B) New techniques for studying infant perception have improved the accuracy with which researchers observe and quantify infant responses
- (C) Indirect observation is most accurate when researchers use it to test auditory and olfactory perception in neonates.
- (D) Visual indicators such as turning the head, blinking the eyes, or crying remain the best evidence of an infant's perceptual abilities.
- (E) Pacifiers are commonly used in studies to calm an infant who has been presented with excessive stimuli.
- (F) Sophisticated techniques that have aided new discoveries about perception in the neonate continue to be indirect measures.

### 参考答案与解析

1. 选 **C**。以 indirect methods 定位至第二句，说用间接方法来观察婴儿能看到什么听到什么，接下来又说与 stimulus 引入之前的状态进行对比，所以答案是 C，不管是 hear 还是 see 都是婴儿的 state，而且只有引入之后的 state 才能与之前的 state 对比得出变化。
2. 选 **C**。uniformly 统一地，consistently 正确。
3. 选 **A**。修辞目的题，修辞点所在的句子上题已经读过，只是在叙述一个例子，而且 for example 进一步说明这句话只是例子。往前看，前句说两种方法的不同告诉研究人员新生儿对刺激的不同反应的 level 和 duration，所以 A 是答案。B 的 only 原文没说；C 的 unrelated 与原文相反；D 的 age 原文没说。
4. 选 **C**。EXCEPT 题，本应该排除法，但原文中非常清楚地写到第一第二第三个局限性，也就是三个正确答案，所以也可以直接选的。第一对应 D，正确，不选；第二对应 B，正确，不选；第三对应 A，正确，不选；所以 C 错，选。
5. 选 **B**。potent 有效的，所以 B 的 powerful 正确。
6. 选 **A**。原句的结构是当 blabla 的时候，必须仔细以防止一件事和另一件事的发生，原文中隐含的主语是我们防止。A 正确，其余三个答案把原句的主干完全改变。B 说婴儿怎么怎么样，原文的我们防止彻底没了；C 主干当中的 conclusive evidence 在原句中完全不主要；D 主句和从句都跟原文不一样。
7. 选 **B**。问第三段整段的目的，看中心句，也就是本段首句，说通过越来越先进的技术可以减少上文中提到的局限性，所以答案是 B。
8. 选 **D**。quantifiable 可计量的，选 measurable。
9. 选 **D**。EXCEPT 题，排除法。A 的 sucking 做关键词定位至最后两句，正确，不选；B 的 heart rate 和 C 的 breaths 做关键词定位至第五句，都正确，不选，所以 D 是答案。
10. 选 **A**。本来可以用 habituation-dishabituation 做关键词的，但发现该词出现了很多次，改用动词 differentiate，但被替换成形容词 different，定位至第四句，说如果婴儿没有显出对新刺激的不适应而继续表现出适应性，就说明他们不能区分，所以答案是 A。
11. 选 **C**。以 brain 做关键词定位至倒数第二句，说另一种技术依靠激发潜能，大脑不同区域对不同刺激有反应，注意从句 where they originate 指的是大脑的反应产生的地方，所以答案是 C，不同区域对不同刺激有反应。其他答案都没提到。
12. 选 **D**。原文很短，可以快速扫过，问题问得出什么结论，本段第二句说我们发现仅仅出生几天的新生儿比我们以前认为的更 perceptive，也就是能感受到更多东西，所以答案是 D。
13. 选 **B**。三个过渡点，名词 repetition, researchers 和 infant's response；根据 researcher 判断答案 A, B 或者 D，根据 infant's response 排除 D，而 B 点之前的 over and over again 是 repetition 的同义词，应该先说重复，然后再说这种重复怎么怎么样，所以答案是 B 不是 A。
14. 选 **ABF**。A 选项对应原文第二段最后一句，正确；B 选项对应原文第三段首句，正确；C 选项是第四段中的一个细节，不选；D 选项是第一段中的一个细节，不选；E 选项是第三段中的一个细节，不选；F 选项对应原文最后一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Maya Water Problems

To understand the ancient Mayan people who lived in the area that is today southern Mexico and Central America and the ecological difficulties they faced, one must first consider their environment, which we think of as “jungle” or “tropical rainforest.” ■ This view is inaccurate, and the reason proves to be important. ■ Properly speaking, tropical rainforests grow in high-rainfall equatorial areas that remain wet or humid all year round. But the Maya homeland lies more than sixteen hundred kilometers from the equator, at latitudes 17 to 22 degrees north, in a habitat termed a “seasonal tropical forest.” ■ That is, while there does tend to be a rainy season from May to October, there is also a dry season from January through April. If one focuses on the wet months, one calls the Maya homeland a “seasonal tropical forest;” if one focuses on the dry months, one could instead describe it as a “seasonal desert.” ■

From north to south in the Yucatan Peninsula, where the Maya lived, rainfall ranges from 18 to 100 inches (457 to 2,540 millimeters) per year, and the soils become thicker, so that the southern peninsula was agriculturally more productive and supported denser populations. But rainfall in the Maya homeland is unpredictably variable between years; some recent years have had three or four times more rain than other years. As a result, modern farmers attempting to grow corn in the ancient Maya homelands have faced frequent crop failures, especially in the north. The ancient Maya were presumably more experienced and did better, but nevertheless they too must have faced risks of crop failures from droughts and hurricanes.

Although southern Maya areas received more rainfall than northern areas, problems of water were paradoxically more severe in the wet south. While that made things hard for ancient Maya living in the south, it has also made things hard for modern archaeologists who have difficulty understanding why ancient droughts caused bigger problems in the wet south than in the dry north. The likely explanation is that an area of underground freshwater underlies the Yucatan Peninsula, but surface elevation increases from north to south, so that as one moves south the land surface lies increasingly higher above the water table. In the northern peninsula the elevation is sufficiently low that the ancient Maya were able to reach the water table at deep sinkholes called cenotes, or at deep caves. In low-elevation north coastal areas without sinkholes, the Maya would have been able to get down to the water table by digging wells up to 75 feet (22 meters) deep. But much of the south lies too high above the water table for cenotes or wells to reach down to it. Making matters worse, most of the Yucatan Peninsula consists of karst, a porous sponge-like limestone terrain where rain runs straight into the ground and where little or no surface water remains available.

How did those dense southern Maya populations deal with the resulting water problem? It initially surprises us that many of their cities were not built next to the rivers but instead on high terrain in rolling uplands. **The explanation is that the Maya excavated depressions, or modified natural depressions, and then plugged up leaks in the karst by plastering the bottoms of the depressions in order to create reservoirs, which collected rain from large plastered catchment basins and stored it for use in the dry season.** For example, reservoirs at the Maya city of Tikal held enough water to meet the drinking water needs of about 10,000 people for a period of 18 months. At the city of Coba the Maya built dikes around a lake in order to raise its level and make their water supply more reliable. But the inhabitants of Tikal and other cities dependent on reservoirs for drinking water would still have been in deep trouble if 18 months passed without rain in a prolonged drought. A shorter drought in which they exhausted their stored food supplies might already have gotten them in deep trouble, because growing crops required rain rather than reservoirs.

1. **Why does the author call the Mayan homeland both a “seasonal tropical forest” and “seasonal desert”?**
  - (A) To illustrate how the climate of the Mayan homeland varied from region to region
  - (B) To explain how the climate of the Mayan homeland is similar to that of a jungle or tropical rainforest
  - (C) To emphasize the vast size of the area that comprised the Mayan homeland in ancient times
  - (D) To make the point that the Mayan homeland is climatically more complex than is generally assumed
2. **Which of the following is NOT mentioned in paragraph 2 as a difference between the northern and southern Yucatan Peninsula?**
  - (A) The annual rainfall was greater in the south.
  - (B) The population density was lower in the north.
  - (C) Agricultural productivity was greater in the south.
  - (D) Rainfall was more unpredictable and variable in the south.
3. **Which of the following statements about ancient and modern agriculture in the Yucatan Peninsula is supported by paragraph 2?**
  - (A) Modern agricultural methods have solved many of the ancient problems of farming in the Yucatan Peninsula.
  - (B) Ancient Mayan farmers may have been somewhat more successful at farming in the Yucatan Peninsula than farmers are today.
  - (C) Farming today is easier than in the past because environmental changes in the Yucatan Peninsula have increased available rainfall.
  - (D) The Yucatan soils in which ancient farmers worked were richer, more productive, and thicker than they are today.
4. **The word “paradoxically” in the passage is closest in meaning to**
  - (A) usually
  - (B) surprisingly
  - (C) understandably
  - (D) predictably
5. **The phrase “The likely explanation” in the passage refers to the explanation for why**
  - (A) the southern Maya areas received more rainfall than the northern areas
  - (B) modern archaeologists have difficulty understanding ancient droughts
  - (C) water problems were most severe in the wet south
  - (D) land surface in the south is so high above the water table
6. **Which of the following statements about the availability of water in the Mayan homeland is supported by paragraph 3?**
  - (A) The construction of wells was an uncommon practice in both the north and the south because it was too difficult to dig through the karst.
  - (B) In most areas in the north and the south, rainwater was absorbed directly into the porous karst.
  - (C) The water table was an important resource for agriculture in both the north and the south of the Yucatan Peninsula.
  - (D) The lack of surface water in both the north and the south was probably due to the fact that most of it was quickly used up for agricultural purposes.
7. **According to paragraph 3, why was the southern Mayan homeland hard to farm?**
  - (A) The presence of numerous sinkholes and wells interfered with farming.
  - (B) Southern soil lacked the depth crops needed for growth.
  - (C) Underground water was too far below the surface to reach.
  - (D) The presence of karst caused frequent flooding.
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Southern Maya populations obtained the water they needed for the dry season by collecting and storing rainwater in sealed depressions.
  - (B) The Maya are credited with creating methods for modifying natural rainwater and storing it.

- (C) Leaks in the karst caused difficulties in the creation of reservoirs, which were needed to store water for the dry season.
- (D) Southern Mayans were more successful at collecting rain than storing it during dry seasons.

**9. What can be inferred from paragraph 4 about how residents of Tikal met their needs for water and food during most periods of drought?**

- (A) They depended upon water and food that had been stored for use during the dry season.
- (B) They obtained drinking water and water for crop irrigation from Coba dikes.
- (C) They located their population centers near a lake where water was available for drinking and watering crops.
- (D) They moved locations every 18 months to find new croplands and water sources.

**10. The word “prolonged” in the passage is closest in meaning to**

- (A) unusual
- (B) unexpected
- (C) extended
- (D) disastrous

**11. The word “exhausted” in the passage is closest in meaning to**

- (A) used up
- (B) reduced
- (C) wasted
- (D) relied upon

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The difference between the two climates challenged the Maya who had to deal with both.

**Where would the sentence best fit?**

**13. Directions: Select from the seven phrases below the phrases that correctly characterize the southern Mayan homeland and the phrases that correctly characterize the northern Mayan homeland. Drag each phrase you select into the appropriate column of the table. Two of the phrases will NOT be used. This question is worth 3 points.**

Southern Mayan homeland (THREE):
Northern Mayan homeland (TWO):

**Answer choices**

- (A) City of Tikal
- (B) Predictable rainfall
- (C) High above water table
- (D) Used reservoirs
- (E) Obtained water from wells
- (F) Dramatically improved corn crops
- (G) Had comparatively thin layer of soil

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **D**。修辞目的题，修辞点所在的句子只是单纯在说一个例子，所以往前看，前句说有雨季也有旱季，所以对应的是答案 D，Maya 地区的气候复杂多变。A 的各个地区不同原文没说；B 没说旱季，错；C 说 Maya 地域广大原文没有。
2. 选 **D**。EXCEPT 题，排除法。A 的 rainfall 做关键词定位至第一句，从北到南 18 到 100 英寸，明显是北小南大，所以 A 正确，不选；B 的 population density 做关键词定位至第一句，说南部 denser，所以北部密度小正确，不选；C 的 productivity 做关键词定位至第一句，说南部更 productive，正确，不选；所以答案是 D。
3. 选 **B**。因为专有名词出现在第一句，所以整段都在说这个地方，明显不适合做关键词，用 ancient 和 modern 做关键词定位至倒数两句，说现代和古代的玛雅人都会遇到同样的问题，但在某种程度上说，古代人比现代人解决得好，所以答案是 B。A 说现代人解决了以前人的问题，说反；C 和 D 原文都没说。
4. 选 **B**。paradoxically 矛盾地，正确答案是 B。
5. 选 **C**。问 the likely explanation 解释的是哪个，按照常理肯定是给出问题之后才会给出可能的解释，所以往前找，前文提出了一个问题，为什么本来湿润的南部地区的缺水问题比干燥的北部地区更严重，所以答案是 C，如果不确定可以看看本句 explanation 的内容，解释为什么南部反而缺水。
6. 选 **B**。问整段支持哪个，所以最好用排除法。A 的 well 做关键词定位至倒数第二句和倒数第三句，原文说北部打井容易，南部难，所以 A 错；B 的 karst 做关键词定位至最后一句，说大部分地区都是岩溶地貌，所以 B 正确；C 的 water table 定位至第三句和倒数第二句，没提到重要性，所以 C 错；D 在原文中完全没有对应。
7. 选 **C**。问题中的关键词难找，所以用排除法。A 的 sinkhole 做关键词定位至倒数第四句，原文没说 sinkhole 干扰了农业的发展，所以 A 错；B 在文章中彻底没说，错；C 正确，因为原文用大量文字说南北的地下水面，说北部地表距离地下水面近，打井容易所以不干旱，南部相反；D 的 flooding 原文没说。
8. 选 **A**。原文的结构是玛雅人挖了 depression 或者修整了本来就有的 depression 用来装水。A 完全体现了这个结构，正确；B 偷换概念，原文说 modify 的是 depression，不是雨水；C 将原文的主语完全改变，错；原文没有比较，所以 D 错。
9. 选 **A**。以专有名词和 drought 做关键词定位至倒数第二句，说他们是依靠 reservoir 的，所以答案是 A，they stored；B 的 Coba dikes，C 的 lake 和 D 的 new croplands 都没说。
10. 选 **C**。prolonged 延长的，extended 正确。
11. 选 **A**。exhaust 消耗，用光，答案是 A 用光。
12. 选 **D**。三个过渡点，名词 difference，名词 two climates 和代词 both，正确插入点之前必须提到两种气候。直到 D 点之前作者才把两种气候都说完，所以答案只能是 D。
13. Southern Mayan homeland 选 **ACD**；Northern Mayan homeland 选 **EG**。注意这道题两个方面是混在一起说的。所以印象不清的话请使用排除法。以 A 选项做关键词定位至第四段倒数第二句，看开头发现整段都在说 south，所以这个属于 south；以 B 选项做关键词定位至第二段，发现原文没说南北，这个不是任何一列的选项；以 C 选项做关键词定位至第三段倒数第二句，说 south 的 water table 高，所以这个选项应该属于 south；以 D 选项做关键词定位至第四段第三四句，说到 T 城，也就是这个选项应该跟第一个选项是同一列，所以也应该属于 south；以 E 选项做关键词定位至第三段倒数第二句和第三句，说北部容易打井，南部不容易，所以这个应该属于 north 的；F 选项原文没说，不是任何一列的选项；以 G 选项做关键词定位至第二段首句，说从北到南，土壤层越来越厚，所以北部薄，所以这个选项应该是 north 的。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Children and Advertising**

Young children are trusting of commercial advertisements in the media, and advertisers have sometimes been accused of taking advantage of this trusting outlook. The Independent Television Commission, regulator of television advertising in the United Kingdom, has criticized advertisers for “misleadingness”—creating a wrong impression either intentionally or unintentionally—in an effort to control advertisers’ use of techniques that make it difficult for children to judge the true size, action, performance, or construction of a toy.

General concern about misleading tactics that advertisers employ is centered on the use of exaggeration. Consumer protection groups and parents believe that children are largely ill-equipped to recognize such techniques and that often exaggeration is used at the expense of product information. Claims such as “the best” or “better than” can be subjective and misleading; even adults may be unsure as to their meaning. They represent the advertiser’s opinions about the qualities of their products or brand and, as a consequence, are difficult to verify. Advertisers sometimes offset or counterbalance an exaggerated claim with a disclaimer—a qualification or condition on the claim. For example, the claim that breakfast cereal has a health benefit may be accompanied by the disclaimer “when part of a nutritionally balanced breakfast.” However, research has shown that children often have difficulty understanding disclaimers: children may interpret the phrase “when part of a nutritionally balanced breakfast” to mean that the cereal is required as a necessary part of a balanced breakfast. The author George Comstock suggested that less than a quarter of children between the ages of six and eight years old understood standard disclaimers used in many toy advertisements and that disclaimers are more readily comprehended when presented in both audio and visual formats. Nevertheless, disclaimers are mainly presented in audio format only.

■ Fantasy is one of the more common techniques in advertising that could possibly mislead a young audience. ■ Child-oriented advertisements are more likely to include magic and fantasy than advertisements aimed at adults. ■ In a content analysis of Canadian television, the author Stephen Kline observed that nearly all commercials for character toys featured fantasy play. ■ Children have strong imaginations and the use of fantasy brings their ideas to life, but children may not be adept enough to realize that what they are viewing is unreal. Fantasy situations and settings are frequently used to attract children’s attention, particularly in food advertising. Advertisements for breakfast cereals have, for many years, been found to be especially fond of fantasy techniques, with almost nine out of ten including such content. Generally, there is uncertainty as to whether very young children can distinguish between fantasy and reality in advertising. **Certainly, rational appeals in advertising aimed at children are limited, as most advertisements use emotional and indirect appeals to psychological states or associations.**

The use of celebrities such as singers and movie stars is common in advertising. The intention is for the positively perceived attributes of the celebrity to be transferred to the advertised product and for the two to become automatically linked in the audience’s mind. In children’s advertising, the “celebrities” are often animated figures from popular cartoons. In the recent past, the role of celebrities in advertising to children has often been conflated with the concept of host selling. Host selling involves blending advertisements with regular programming in a way that makes it difficult to distinguish one from the other. Host selling occurs, for example, when a children’s show about a cartoon lion contains an ad in which the same lion promotes a breakfast cereal. The psychologist Dale Kunkel showed that the practice of host selling reduced children’s ability to distinguish between advertising and program material. It was also found that older children responded more positively to products in host selling advertisements.

Regarding the appearance of celebrities in advertisements that do not involve host selling, the evidence is mixed. Researcher Charles Atkin found that children believe that the characters used to advertise breakfast cereals are knowledgeable about cereals, and children accept such characters as credible sources of nutritional information. This finding was even more marked for heavy viewers of television. In addition, children feel validated in their choice of a product when a celebrity endorses that product. A study of children in Hong Kong, however, found that the presence of celebrities in advertisements could negatively affect the children’s perceptions of a product if the children did not like the celebrity in question.

1. Which of the following is NOT mentioned in paragraph 1 as being a difficult judgment for children to make about advertised toys?
  - (A) How big the toys are
  - (B) How much the toys cost
  - (C) What the toys can do
  - (D) How the toys are made
2. The word “verify” in the passage is closest in meaning to
  - (A) establish the truth of
  - (B) approve of
  - (C) understand
  - (D) criticize
3. In paragraph 2, what is one reason that claims such as “the best” or “better than” can be misleading?
  - (A) They represent the opinions of adults, which are often different from those of children.
  - (B) They generally involve comparisons among only a small group of products.
  - (C) They reflect the attitudes of consumer protection groups rather than those of actual consumers.
  - (D) They reflect the advertiser’s viewpoint about the product.
4. Cereal advertisements that include the statement “when part of a nutritionally balanced breakfast.” are trying to suggest that
  - (A) the cereal is a desirable part of a healthful, balanced breakfast
  - (B) the cereal contains equal amounts of all nutrients
  - (C) cereal is a healthier breakfast than other foods are
  - (D) the cereal is the most nutritious part of the breakfast meal
5. According to paragraph 2, all of the following are true of disclaimers made in advertisements EXCEPT
  - (A) They are qualifications or conditions put on a claim.
  - (B) They may be used to balance exaggerations.
  - (C) They are usually presented in both audio and visual formats.
  - (D) They are often difficult for children to understand.
6. The word “adept” in the passage is closest in meaning to
  - (A) responsible
  - (B) skillful
  - (C) patient
  - (D) curious
7. Paragraph 3 indicates that there is uncertainty about which of the following issues involving children and fantasy in advertising?
  - (A) Whether children can tell if what they are seeing in an advertisement is real or fantasy
  - (B) Whether children can differentiate fantasy techniques from other techniques used in advertising
  - (C) Whether children realize how commonly fantasy techniques are used in advertising aimed at them
  - (D) Whether children are attracted to advertisements that lack fantasy
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Rational appeals in advertising are certainly limited by children’s emotional immaturity and the indirect nature of their associations.
  - (B) Indirect appeals to children’s psychological states or associations can limit the effectiveness of rational appeals in advertising.
  - (C) Rational appeals play a much smaller role in advertisements for children than emotional appeals and psychological associations do.
  - (D) Rational appeals in advertising aimed at children should certainly be limited until the children are emotionally and psychologically ready.
9. The word “attributing” in the passage is closest in meaning to

- (A) evaluations
- (B) attitudes
- (C) actions
- (D) characteristics

**10. In paragraph 4, why does the author mention a show about a cartoon lion in which an advertisement appears featuring the same lion character?**

- (A) To help explain what is meant by the term "host selling" and why it can be misleading to children
- (B) To explain why the role of celebrities in advertising aimed at children has often been confused with host selling
- (C) To compare the effectiveness of using animated figures with the effectiveness of using celebrities in advertisements aimed at children
- (D) To indicate how Kunkel first became interested in studying the effects of host selling on children

**11. The word "credible" in the passage is closest in meaning to**

- (A) helpful
- (B) believable
- (C) valuable
- (D) familiar

**12. According to paragraph 5, what did a study of children in Hong Kong show about the use of celebrities in advertisements aimed at children?**

- (A) It is most effective with children who watch a lot of television.
- (B) It has little effect if the celebrities are not familiar to most children.
- (C) It is more effective in marketing cereals and food products than in marketing other kinds of products.
- (D) It can have a negative effect if the celebrities are not popular with children.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Another aspect of advertising that may especially influence children is fantasy.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Advertisers sometimes use strategies that can mislead children.

**Answer choices**

- (A) Advertisements can be misleading to children when the advertisements use audio and visual formats that are especially appealing to children.
- (B) Children may not be able to interpret exaggerated claims made by advertisers or understand the disclaimers used to offset claims.
- (C) Although the use of celebrities is not necessarily effective in advertisements aimed at children, there is evidence that host selling can positively affect their views of a product.
- (D) Studies show that misleading tactics are used most often in commercials for breakfast cereals, with toy commercials using such tactics only slightly less frequently.
- (E) The use of fantasy is especially common in advertisements for children, but children may not be able to distinguish fantasy from reality.
- (F) Very young children are particularly influenced by host selling, while slightly older children are more readily misled by seemingly rational claims such as "the best."

### 参考答案与解析

1. 选 **B**。EXCEPT 题，排除法，所有答案都集中在最后一句，A 的 big 对应 size，正确，不选；B 的 cost 没有对应，错，选；C 的 do 对应 performance，正确，不选；D 的 made 对应 construction，正确，不选。
2. 选 **A**。verify 核实，establish the truth 正确。
3. 选 **D**。因为下一句的 they 指代上句的 better than 和 best，所以往下看，说 best 和 better than 代表了生产商对于自己的产品和品牌的看法，结果其真实性难以判断，这就是 misleading 的原因，所以答案是 D。
4. 选 **A**。修辞目的题，修辞点所在的句子只是单纯在说一个例子，而且以一个 for example 开头，明显是为了证明前一句的，前句说广告商有时会用一句免责声明来平衡他们的夸张说法，然后就说比如 blabla，所以这个修辞点应该是一则免责声明，所以答案是 A，只有有了早饭这个麦片才有营养。
5. 选 **C**。以 disclaimer 做关键词定位至第五句，答案 A 和 B 在第五句出现，都正确，不选；答案 D 在 However 句中出现，所以正确，不选；C 答案原文没说，错，选。
6. 选 **B**。adept 熟练的，所以答案 B 的 skillful 正确。
7. 选 **A**。以 uncertainty 定位至倒数第二句，说我们不确定孩子能不能分清广告中看到的東西是真的还是假的，所以答案是 A。B 的 other techniques，C 的 commonly 和 D 的 lack fantasy 原文都没说。
8. 选 **C**。原句的结构就是 rational 的少，不 rational 的多，所以答案明显是 C。A 的 emotional immaturity 原文没说；B 的谓语 limit 是偷换，而且也没有将两者比较；D 同样有说到 limit，这是原文没有的，所以错。
9. 选 **D**。attribute 特征，所以答案 D 正确。
10. 选 **A**。修辞目的题，修辞点所在的句子只是单纯在说一个例子，而且包含一个 for example，明显是为了证明前一句的，前句介绍了一个新概念叫做 host selling，所以答案是 A 介绍什么是 host selling。因为前句说 host selling 使孩子难以区分真实的电视节目和广告，所以是 misleading。
11. 选 **B**。credible 可信的，答案是 believable。
12. 选 **D**。问 Hong Kong 的研究结果是什么，看第五段最后一句，指出当儿童不喜欢广告中的 celebrity 时就会负面影响广告效果，所以选 D。
13. 选 **A**。此题是一道不典型的插入句子题。按通常的做法，有 another 的都不应该插入第一点，因为前文应该有一个后面才有另一个，但这道题答案是 A。这道题只找 fantasy 或者 children 都不行，所以找 influence children，与第一句的 mislead young audience 同义重合，所以 A 或者 B 可能正确，但待插入句提到了一个概念 fantasy，所以应该先提出概念，B 错。
14. 选 **BCE**。A 选项原文没说，不选；B 选项对应原文第二段第一句，正确；C 选项对应原文第四段，正确；D 选项原文没说，不选；E 选项对应原文第三段第一句和倒数第二句，正确；F 选项原文没说，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Pastoralism in Ancient Inner Eurasia**

Pastoralism is a lifestyle in which economic activity is based primarily on livestock. Archaeological evidence suggests that by 3000 B.C., and perhaps even earlier, there had emerged on the steppes of Inner Eurasia the distinctive types of pastoralism that were to dominate the region's history for several millennia. Here, the horse was already becoming the animal of **prestige** in many regions, though sheep, goats, and cattle could also play a vital role. It is the use of horses for transportation and warfare that explains why Inner Eurasian pastoralism proved the most mobile and the most militaristic of all major forms of pastoralism. The emergence and spread of pastoralism had a **profound** impact on the history of Inner Eurasia, and also, indirectly, on the parts of Asia and Europe just outside this area. In particular, pastoralism favors a mobile lifestyle, and this mobility helps to explain the impact of pastoralist societies on this part of the world.

The mobility of pastoralist societies reflects their dependence on animal-based foods. While agriculturalists rely on domesticated plants, pastoralists rely on domesticated animals. As a result, pastoralists, like carnivores in general, occupy a higher position on the food chain. All else being equal, this means they must exploit larger areas of land than do agriculturalists to secure the same amount of food, clothing, and other necessities. So pastoralism is a more extensive lifeway than farming is. However, the larger the terrain used to support a group, the harder it is to exploit that terrain while remaining in one place. So, basic ecological principles imply a strong tendency within pastoralist lifeways toward nomadism (a mobile lifestyle). As the archaeologist Roger Cribb puts it, "The greater the degree of pastoralism, the stronger the tendency toward nomadism." A modern Turkic nomad interviewed by Cribb commented: "The more animals you have, the farther you have to move."

Nomadism has further consequences. It means that pastoralist societies occupy and can influence very large territories. This is particularly true of the horse pastoralism that emerged in the Inner Eurasian steppes, for this was the most mobile of all major forms of pastoralism. So, it is no accident that with the appearance of pastoralist societies there appear large areas that share similar cultural, ecological, and even linguistic features. By the late fourth millennium B.C., there is already evidence of large culture zones reaching from Eastern Europe to the western borders of Mongolia. Perhaps the most **striking** sign of mobility is the fact that by the third millennium B.C., most pastoralists in this huge region spoke related languages ancestral to the modern Indo-European languages. The remarkable mobility and range of pastoral societies explain, in part, why so many linguists have argued that the Indo-European languages began their astonishing expansionist career not among farmers in Anatolia (present-day Turkey), but among early pastoralists from Inner Eurasia. Such theories imply that the Indo-European languages evolved not in Neolithic (10,000 to 3,000 B.C.) Anatolia, but among the foraging communities of the cultures in the region of the Don and Dnieper rivers, which took up stock breeding and began to **exploit** the neighboring steppes.

Nomadism also subjects pastoralist communities to **strict rules of portability**. ■ If you are constantly on the move, you cannot afford to accumulate large material surpluses. ■ Such rules limit variations in accumulated material goods between pastoralist households (though they may also encourage a taste for portable goods of high value such as silks or jewelry). ■ So, by and large, nomadism implies a high degree of self-sufficiency and inhibits the appearance of an extensive division of labor. ■ Inequalities of wealth and rank certainly exist, and have probably existed in most pastoralist societies, but except in periods of military conquest, they are normally too slight to generate the stable, hereditary hierarchies that are usually implied by the use of the term class. **Inequalities of gender have also existed in pastoralist societies, but they seem to have been softened by the absence of steep hierarchies of wealth in most communities, and also by the requirement that women acquire most of the skills of men, including, often, their military skills.**

1. The word **“prestige”** in the passage is closest in meaning to
  - (A) interest
  - (B) status
  - (C) demand
  - (D) profit
2. According to paragraph 1, what made it possible for Inner Eurasian pastoralism to become the most mobile and militaristic form of pastoralism?
  - (A) It involved the domestication of several types of animals.
  - (B) It was based primarily on horses rather than on other animals.
  - (C) It borrowed and improved upon European ideas for mobility and warfare.
  - (D) It could be adapted to a wide variety of environments.
3. The word **“profound”** in the passage is closest in meaning to
  - (A) strange
  - (B) positive
  - (C) direct
  - (D) far-reaching
4. In paragraph 2, why does the author contrast pastoralists with agriculturalists?
  - (A) To explain why pastoralism requires more land than agriculturalism to support basic needs
  - (B) To identify some advantages that mobile societies have over immobile societies
  - (C) To demonstrate that ecological principles that apply to pastoralism do not apply to agriculturalism
  - (D) To argue that agriculturalism eventually developed out of pastoralism
5. According to paragraph 2, pastoralists tend to
  - (A) prefer grazing their animals on agricultural lands
  - (B) consume comparatively large amounts of food and clothing
  - (C) avoid eating plant foods
  - (D) move from place to place frequently
6. In paragraph 3, why does the author discuss languages spoken in the region spanning from Eastern Europe to the western borders of Mongolia?
  - (A) To emphasize the frequency with which Indo-European languages changed as a result of the mobile nature of pastoralism
  - (B) To indicate one method linguists use to determine that inhabitants of the Don and Dnieper river area had taken up stock breeding
  - (C) To provide evidence that Indo-European languages have their roots in what is now Turkey
  - (D) To provide evidence that pastoralist societies can exercise cultural influence over a large area
7. The word **“striking”** in the passage is closest in meaning to
  - (A) reliable
  - (B) noticeable
  - (C) convincing
  - (D) violent
8. The word **“exploit”** in the passage is closest in meaning to
  - (A) use to advantage
  - (B) depart from
  - (C) pay attention to
  - (D) travel from
9. According to paragraph 4, the fact that pastoralist communities are subject to **“strict rules of portability”** encourages such communities to
  - (A) relocate less frequently than they would otherwise
  - (B) have households that are more or less equal in wealth
  - (C) become self-sufficient in the manufacture of silk and jewelry
  - (D) share large material surpluses with neighboring communities
10. According to paragraph 4, all of the following are true of social inequality in pastoralist societies EXCEPT

- (A) It exists and has existed to some degree in most pastoral societies.
- (B) It is most marked during periods of military conquest.
- (C) It is expressed in the form of a rigid hierarchy based largely on heredity.
- (D) It is usually too insignificant to be discussed in terms of class differences.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Despite the fact that wealth is relatively evenly distributed in pastoral societies, gender inequality still exists because only men can acquire military skills and social status.
- (B) Inequalities of gender existed in pastoralist societies until most communities began to require women to possess the same skills as men and take part in the military.
- (C) Inequalities of gender in pastoralist societies were caused by steep hierarchies of wealth and differences in military training between men and women.
- (D) In pastoral societies, gender inequality is comparatively mild because wealth is relatively evenly distributed and women have to learn most of the same skills that men do.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

There is a good reason for this.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

By 3000 B.C., a distinctive form of pastoralism had appeared on the steppes of Inner Eurasia.

**Answer choices**

- (A) The domesticated horse is primarily responsible for Inner Eurasian pastoralism's success in mobility and warfare.
- (B) As pastoralists traveled across large areas of terrain with their domesticated animals, they traded valuable material goods such as silks and jewelry.
- (C) Because pastoralists are highly mobile, they tend to have few material possessions and can influence the culture, ecology, and language of very large areas.
- (D) Because pastoralism requires a great deal of land to support its animal-based lifeway, pastoralists must continually relocate and have comparatively egalitarian societies.
- (E) Most scholars now believe that Indo-European languages probably evolved during the Neolithic period in the region of the Don and Dnieper rivers.
- (F) Pastoralist communities do not have social classes in the usual sense because they value spiritual attainment over material wealth.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。prestige 威望，所以 B 的 status 正确。
2. 选 **B**。以 most mobile and most militaristic 做关键词定位至倒数第三句，说以马匹做运输工具和福利使得 Inner Eurasia pastoralism 最 mobile，答案是 B，C 虽然提到了 welfare，但不是 borrow 的，所以不选。
3. 选 **D**。profound 深远的，far-reaching 正确。
4. 选 **A**。首先找到对比，本段前两句分别说了游牧民族和定居民族的特点，一个是依靠动物及其食物，另一个是驯养动物。紧接着说了这种对比的结果，也就是作者做这个对比的目的。游牧民族就像食肉动物一样，在食物链中占据了较高的等级，所以需要更多地盘。所以对比的目的就是解释为什么游牧民族需要占领更多地方，答案是 A。此题特殊，修辞目的在修辞点所在句子后面，需要多加注意。
5. 选 **D**。问题当中关键词难找，但可以从上题 pastoralist 和 agriculturalist 的对比，也就是本段的第一二两句中得出答案 D，说游牧民族经常四处游走。A 和 C 原文都没说，B 项与原文说反，原文第四句说游牧民族必须四处走以保证同样量的 food and clothing，所以 B 错。
6. 选 **D**。首先以 Eastern Europe 和 Mongolia 做关键词定位至第四句，原句单纯讲述了一个例子，所以往前看，前句说由于游牧民族的存在，出现了很大一块地域范围内共享相似的生态上的、文化上的甚至语言上的特点。紧接着就说了语言上的一个例子，所以语言的这个例子是为了证明前文的，答案是 D。
7. 选 **B**。striking 引人注意的，noticeable 正确。
8. 选 **A**。exploit 利用，开采，剥削，所以 A 正确。
9. 选 **B**。第一句只是在说这件事，所以往后看，而下一句是对第一句内容的解释，不是答案。下句说这些规则限制了大家拥有的财产的差别，也就是说大家的财富都差不多，所以答案是 B。没推出来的用排除法，A 的 relocate 原文没说；C 把原文 self-sufficient 和括号里的例子搅在一起，偷换概念，错；D 的 share 原文没说。
10. 选 **C**。EXCEPT 题，排除法，此题较难。A 的 some degree 做关键词定位至倒数第二段的前半句，正确，不选；B 的 military conquest 做关键词定位至倒数第二句的逗号之后，原文说除了 military conquest 之外都很不明显，也就是 B 说的 military conquest 期间明显，所以 B 正确，不选；C 的 rigid hierarchy 做关键词定位至倒数第二句后半句，原文说平时不明显，也就是不能 express，而 C 说能 express，说反，选；D 的 class difference 做关键词定位至倒数第二句后半句，原文说平时不显著，所以 D 说对，不选。
11. 选 **D**。原句的结构是不平等存在，但是由于两个因素被减弱了。A 有原文的转折，但后面给出的原因反了，而且仔细看发现 despite 之后的东西也和原文不一样，所以 A 错；B 的直到什么时候原文没有，而且原文的很重要的谓语 softened 答案没有，所以错；C 只说到原因，也没说到减弱，错；D 正确。
12. 选 **A**。此题过渡点只有一个，就是 reason，也就是说正确插入点前后的两个句子必须是因果关系，而待插入句只是一句过渡的废话。A 点之后说了游牧民族遵守规则的原因。如果没看出来可以用排除法，B 点的 such rules 之前必须有指代，所以 B 排除；C 之前说带的东西都差不多，后面说他们都得自给自足，这个地方因果关系也很恰当，所以 C 排除，而且也不能 there is a reason for this 然后就出个 so；D 的前后无论如何也不是因果，所以 D 错。
13. 选 **ACD**。A 选项对应原文第一段首句，正确；B 选项原文没说，虽然提到 jewelry，但没说 trade，而且即使说了也是细节，不选；C 选项对应原文第三段的第一句和第二句，正确；D 选项对应原文第四段，正确；E 选项是第三段的一个细节，不选；F 选项原文没说，不选。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## A Warm-blooded Turtle

When it comes to physiology, the leatherback turtle is, in some ways, more like a reptilian whale than a turtle. It swims farther into the cold of the northern and southern oceans than any other sea turtle, and it deals with the chilly waters in a way **unique among** reptiles.

A warm-blooded turtle may seem to be a contradiction in terms. Nonetheless, an adult leatherback can maintain a body temperature of between 25 and 26°C (77–79°F) in seawater that is only 8°C (46.4°F). Accomplishing this **feat** requires adaptations both to generate heat in the turtle's body and to keep it from escaping into the surrounding waters. Leatherbacks apparently do not generate internal heat the way we do, or the way birds do, as a by-product of cellular metabolism. A leatherback may be able to pick up some body heat by basking at the surface; its dark, almost black body color may help it to absorb solar radiation. However, most of its internal heat comes from the action of its muscles.

Leatherbacks keep their body heat in three different ways. The first, and simplest, is size. The bigger the animal is, the lower its surface-to-volume ratio; for every ounce of body mass, there is proportionately less surface through which heat can escape. An adult leatherback is twice the size of the biggest cheloniid sea turtles and will therefore take longer to cool off. Maintaining a high body temperature through sheer **bulk** is called gigantothermy. ■ It works for elephants, for whales, and, perhaps, it worked for many of the larger dinosaurs. ■ It apparently works, in a smaller way, for some other sea turtles. ■ Large loggerhead and green turtles can maintain their body temperature at a degree or two above that of the surrounding water, and gigantothermy is probably the way they do it. ■ Muscular activity helps, too, and an actively swimming green turtle may be 7°C (12.6°F) warmer than the waters it swims through.

Gigantothermy, though, would not be enough to keep a leatherback warm in cold northern waters. It is not enough for whales, which supplement it with a thick layer of insulating blubber (fat). Leatherbacks do not have blubber, but they do have a reptilian equivalent: thick, oil-saturated skin, with a layer of fibrous, fatty tissue just beneath it. Insulation protects the leatherback everywhere but on its head and flippers. Because the flippers are comparatively thin and blade-like, they are the one part of the leatherback that is likely to become chilled. There is not much that the turtle can do about this without compromising the aerodynamic shape of the flipper. The problem is that as blood flows through the turtle's flippers, it risks losing enough heat to lower the animal's central body temperature when it returns. The solution is to allow the flippers to cool down without drawing heat away from the rest of the turtle's body. The leatherback accomplishes this by arranging the blood vessels in the base of its flipper into a countercurrent exchange system.

**In a countercurrent exchange system, the blood vessels carrying cooled blood from the flippers run close enough to the blood vessels carrying warm blood from the body to pick up some heat from the warmer blood vessels; thus, the heat is transferred from the outgoing to the ingoing vessels before it reaches the flipper itself.** This is the same arrangement found in an **old-fashioned steam radiator**, in which the coiled pipes pass heat back and forth as water **courses through** them. The leatherback is certainly not the only animal with such an arrangement; gulls have a countercurrent exchange in their legs. That is why a gull can stand on an ice floe without freezing.

All this applies, of course, only to an adult leatherback. Hatchlings are simply too small to conserve body heat, even with insulation and countercurrent exchange systems. We do not know how old, or how large, a leatherback has to be before it can switch from a cold-blooded to a warm-blooded mode of life. Leatherbacks reach their immense size in a much shorter time than it takes other sea turtles to grow. Perhaps their rush to adulthood is driven by a simple need to keep warm.

1. The phrase “unique among” in the passage is closest in meaning to
  - (A) natural to
  - (B) different from all other
  - (C) quite common among
  - (D) familiar to
2. What can be inferred about whales from paragraph 1?
  - (A) They are considered by some to be reptiles.
  - (B) Their bodies are built in a way that helps them manage extremely cold temperatures.
  - (C) They are distantly related to leatherback turtles.
  - (D) They can swim farther than leatherback turtles.
3. The word “feat” in the passage is closest in meaning to
  - (A) remarkable achievement
  - (B) common transformation
  - (C) daily activity
  - (D) complex solution
4. Paragraph 2 mentions all of the following as true about the body heat of adult leatherback turtles EXCEPT
  - (A) Their muscles produce heat for maintaining body temperature.
  - (B) Their dark bodies help trap solar radiation.
  - (C) Their cellular metabolism produces heat as a by-product.
  - (D) Basking at the water’s surface helps them obtain heat.
5. The word “bulk” in the passage is closest in meaning to
  - (A) strength
  - (B) effort
  - (C) activity
  - (D) mass
6. The word “it” in paragraph 4 refers to
  - (A) the problem
  - (B) blood
  - (C) the turtle
  - (D) body temperature
7. According to paragraph 4, which of the following features enables the leatherback turtle to stay warm?
  - (A) An insulating layer of blubber
  - (B) A thick, oily skin covering fatty tissue
  - (C) The aerodynamic shape of its flippers
  - (D) A well-insulated head
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) In a turtle’s countercurrent exchange system, outgoing vessels lie near enough to ingoing ones that heat can be exchanged from the former to the latter before reaching the turtle’s flippers.
  - (B) Within the turtle’s flippers, there is a countercurrent exchange system that allows colder blood vessels to absorb heat from nearby warmer blood vessels and then return warmed blood to the turtle’s body.
  - (C) In a countercurrent exchange system, a turtle can pick up body heat from being close enough to other turtles, thus raising its blood temperature as it passes them.
  - (D) When a turtle places its flippers close to its body, it is able to use its countercurrent exchange system to transfer heat from the warmer blood vessels in its body to the cooler blood vessels in its flippers.
9. Why does the author mention “old-fashioned steam radiator” in the discussion of countercurrent exchange systems?
  - (A) To argue that a turtle’s central heating system is not as highly evolved as that of other warmblooded animals

- (B) To provide a useful comparison with which to illustrate how a countercurrent exchange system works
- (C) To suggest that steam radiators were modeled after the sophisticated heating system of turtles
- (D) To establish the importance of the movement of water in countercurrent exchange systems

**10. The phrase “courses through” in the passage is closest in meaning to**

- (A) rises through
- (B) heats up in
- (C) runs through
- (D) collects in

**11. According to paragraph 6, which of the following statements is most accurate about young leatherback turtles?**

- (A) They lack the countercurrent exchange systems that develop in adulthood.
- (B) Their rate of growth is slower than that of other sea turtles.
- (C) They lose heat easily even with insulation and countercurrent exchange systems.
- (D) They switch between cold-blooded and warm-blooded modes throughout their hatchling stage.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

However, these animals have additional means of staying warm.

**Where would the sentence best fit?**

**13. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Contrary to what we would expect of reptiles, the leatherback turtle is actually warm-blooded.

**Answer choices**

- (A) Even though they swim into cold ocean waters, leatherbacks maintain their body heat in much the same way as sea turtles in warm southern oceans do.
- (B) The leatherback turtle uses a countercurrent exchange system in order to keep the flippers from drawing heat away from the rest of the body.
- (C) The shape of the leatherback turtle’s flippers is especially important in maintaining heat in extremely cold northern waters.
- (D) The leatherback turtle is able to maintain body heat through sheer size.
- (E) Leatherbacks have an insulating layer that can be considered the reptilian version of blubber.
- (F) Young leatherbacks often do not survive to adulthood because they are not able to switch from a cold-blooded way of life to a warm-blooded one quickly enough.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。unique 独特，那么 unique among 就是在一大堆东西之间很独特的意思，所以答案是 B。
2. 选 **B**。以 whale 定位至第一句，说 leatherback turtle 更像鲸而不像爬行动物，然后就说这种 turtle 能游的远，也就是说鲸能游得远，所以答案是 B。A 说鲸是爬行动物违反常识，而且原文也没说；原文说他们 physiology 上像，没说它们是否相关，所以 C 错；至于两个谁游得远文章干脆没提，所以 D 错。
3. 选 **A**。feat 功绩，成就，所以答案 A 正确。
4. 选 **C**。EXCEPT 题，排除法。A 的 muscles 做关键词定位至最后一句，说可以通过肌肉的活动获得热量，正确，不选；B 的 dark body 做关键词定位至第三句，说黑色体表可以捕获太阳辐射，正确，不选；C 的 by-product 做关键词定位至第四句，但原文说不像我们和鸟类那样把热量作为新陈代谢的副产品，所以与 C 说的刚好相反，C 是答案；D 的 basking 和 surface 做关键词定位至倒数第二句，说通过 basking 可以获得热量，正确，不选。
5. 选 **D**。bulk 巨大的，体积，所以答案是 mass。
6. 选 **B**。往前找，找 as 那句话的主语，答案是 B，代进去说 blood 丧失热量说得通。A 和 D 代进去说不通，turtle 虽然在前文出现但都不是所在词组的核心名词，所以不选。
7. 选 **B**。关键词不好找，可以用排除法。A 的 blubber 做关键词定位至第五段第一句的前半句，原文明显说没有，所以 A 说反；B 的 fatty tissue 做关键词定位至第五段第一句的后半句，原词重现，所以这个答案正确；C 的 flipper 做关键词定位至倒数第三和第四句，没说 flipper 和维持体温的关系，不选；D 的 head 做关键词定位至第五段第二句，同样没说 head 和维持体温的关系，不选。
8. 选 **A**。原句的结构是一个血管离另一个近，因此之间可以转移能量，所以答案 A 正确。B 的 within 那个状语原文就没说；原文说是一个血管离另一个血管近，不是一只乌龟靠近另一只乌龟，C 完全不靠谱；原文说两个血管靠的近，不是 D 说的冷血的血管在 flipper 里面；几个错误答案都偷换了原文的概念。
9. 选 **B**。修辞目的题，修辞点所在的句子只是单纯的说一个例子，而且开头就说 this the same，证明前句有答案。前句就是我们上题分析的句子，所以答案是 B，将两者进行一个对比。A 的 argue 作者在原文没说，错；C 说 steam radiator 是跟乌龟学的，原文没有相关信息，错；D 的 water 只是单纯陈述的例子的一部分，不是观点，错。
10. 选 **C**。course 课程、快跑，所以 course through 就是通过之意，答案是 C。
11. 选 **C**。以 young leatherback turtle 做关键词定位至第二句，注意第二句中的 hatchling 与关键词同义重合。说幼崽因为身形太小，尽管有 countercurrent system 也不能保住身体的热量，所以答案是 C。A 说没有热交换系统与原文相反；B 选项与原文倒数第二句相反；D 冷热血变换原文没说。
12. 选 **D**。三个过渡点，名词 additional means，代词 these 和连词 however。这道题最有用的过渡点是第一个，因为 additional means 就说明之前还有其他维持体温的方法，而直到 D 点之前文章都在说 gigantothermy 这种靠体积维持体温的方法，所以答案是 D。此外，A 和 B 之后的 it 都说明这两点衔接紧密，不插入任何句子；D 点后的 muscular activity 是与之之前不同的一种方法，进一步证明 D 正确。
13. 选 **BDE**。A 选项与第一段最后一句说反，不选；B 选项对应原文第六段第一句，正确；C 选项原文没说，不选；D 选项对应原文第三段第一句和第二句，正确；E 选项原文第五段第一句，正确；F 选项对应第七段，但原文没说不能成年，不选。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Mass Extinctions**

■ Cases in which many species become extinct within a geologically short interval of time are called mass extinctions. ■ There was one such event at the end of the Cretaceous period (around 70 million years ago). ■ There was another, even larger, mass extinction at the end of the Permian period (around 250 million years ago). ■ The Permian event has attracted much less attention than other mass extinctions because mostly unfamiliar species perished at that time.

The fossil record shows at least five mass extinctions in which many families of marine organisms died out. The rates of extinction happening today are as great as the rates during these mass extinctions. Many scientists have therefore concluded that a sixth great mass extinction is currently in progress.

What could cause such high rates of extinction? There are several hypotheses, including warming or cooling of Earth, changes in seasonal fluctuations or ocean currents, and changing positions of the continents. Biological hypotheses include ecological changes brought about by the evolution of cooperation between insects and flowering plants or of bottom-feeding predators in the oceans. Some of the proposed mechanisms required a very brief period during which all extinctions suddenly took place; other mechanisms would be more likely to have taken place more gradually, over an extended period, or at different times on different continents. Some hypotheses fail to account for simultaneous extinctions on land and in the seas. Each mass extinction may have had a different cause. Evidence points to hunting by humans and habitat destruction as the likely causes for the current mass extinction.

**American paleontologists David Raup and John Sepkoski, who have studied extinction rates in a number of fossil groups, suggest that episodes of increased extinction have recurred periodically, approximately every 26 million years since the mid-Cretaceous period.** The late Cretaceous extinction of the dinosaurs and ammonoids was just one of the more drastic in a whole series of such recurrent extinction episodes. The possibility that mass extinctions may recur periodically has given rise to such hypotheses as that of a companion star with a long-period orbit deflecting other bodies from their normal orbits, making some of them fall to Earth as meteors and causing widespread devastation upon impact.

Of the various hypotheses attempting to account for the late Cretaceous extinctions, the one that has attracted the most attention in recent years is the asteroid-impact hypothesis first suggested by Luis and Walter Alvarez. According to this hypothesis, Earth collided with an asteroid with an estimated diameter of 10 kilometers, or with several asteroids, the combined mass of which was comparable. The force of collision spewed large amounts of debris into the atmosphere, darkening the skies for several years before the finer particles settled. The reduced level of photosynthesis led to a massive decline in plant life of all kinds, and this caused massive starvation first of herbivores and subsequently of carnivores. The mass extinction would have occurred very suddenly under this hypothesis.

One interesting test of the Alvarez hypothesis is based on the presence of the rare-earth element iridium (Ir). Earth's crust contains very little of this element, but most asteroids contain a lot more. Debris thrown into the atmosphere by an asteroid collision would presumably contain large amounts of iridium, and atmospheric currents would carry this material all over the globe. A search of sedimentary deposits that span the boundary between the Cretaceous and Tertiary periods shows that there is a dramatic increase in the abundance of iridium briefly and precisely at this boundary. This iridium anomaly offers strong support for the Alvarez hypothesis even though no asteroid itself has ever been recovered.

An asteroid of this size would be expected to leave an immense crater, even if the asteroid itself was disintegrated by the impact. The intense heat of the impact would produce heat-shocked quartz in many types of rock. Also, large blocks thrown aside by the impact would form secondary craters surrounding the main crater. To date, several such secondary craters have been found along Mexico's Yucatan Peninsula, and heat-shocked quartz has been found both in Mexico and in Haiti. A location called Chicxulub, along the Yucatan coast, has been suggested as the primary impact site.

1. **Paragraph 1 supports which of the following statements about mass extinctions?**
  - (A) They take place over a period of 70 million years.
  - (B) They began during the Cretaceous period.
  - (C) They eliminate many animal species that exist at the time they occur.
  - (D) They occur every 250 million years.
2. **According to paragraph 2, scientists base their belief that a mass extinction is going on at present on which of the following?**
  - (A) The speed with which mass extinctions are happening today is similar to the speed of past extinctions.
  - (B) The number of species that have died out since the last extinction event is extremely large.
  - (C) Mass extinctions occur with regularity and it is time for another one.
  - (D) Fossil records of many marine species have disappeared.
3. **The word “extended” in the passage is closest in meaning to**
  - (A) specific
  - (B) unlimited
  - (C) reasonable
  - (D) long
4. **According to paragraph 3, each of the following has been proposed as a possible cause of mass extinctions EXCEPT**
  - (A) habitat destruction
  - (B) continental movement
  - (C) fierce interspecies competition
  - (D) changes in Earth’s temperature
5. **Paragraph 3 supports which of the following ideas about mass extinctions?**
  - (A) Scientists know the exact causes of most mass extinctions.
  - (B) Mass extinctions are unlikely to happen again in the future.
  - (C) Insects, flowering plants, and bottom-feeding predators in the oceans tend to be the first organisms to disappear during episodes of mass extinctions.
  - (D) Some mass extinctions occurred on land and in the seas at the same time.
6. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Based on their studies of extinction rates of numerous fossil groups, paleontologists David Raup and John Sepkoski have determined that mass extinctions occur about every 26 million years.
  - (B) David Raup and John Sepkoski studied extinction rates of numerous fossil groups and suggest that mass extinctions during the Cretaceous period continued for 26 million years.
  - (C) Studies that paleontologists David Raup and John Sepkoski conducted of various fossil groups have revealed that extinction rates have increased over the past 26 million years.
  - (D) The studies conducted by paleontologists David Raup and John Sepkoski of the fossil remains of species suggest that the extinction rate of species started to increase by the middle of the Cretaceous period.
7. **According to paragraph 4, what aspect of extinction episodes does the companion-star hypothesis supposedly clarify?**
  - (A) Their location
  - (B) Their frequency
  - (C) Their duration
  - (D) Their severity
8. **The phrase “account for” in the passage is closest in meaning to**
  - (A) describe
  - (B) challenge
  - (C) explain
  - (D) test
9. **According to paragraph 6, what made iridium a useful test of the Alvarez hypothesis?**

- (A) Its occurrence in a few locations on Earth against several locations on other planets
- (B) Its occurrence in limited quantities on Earth against its abundance in asteroids
- (C) Its ability to remain solid at extremely high temperatures
- (D) Its ease of detection even in very small amounts

**10. In stating that “no asteroid itself has ever been recovered”, the author emphasizes which of the following?**

- (A) The importance of the indirect evidence for a large asteroid
- (B) The fact that no evidence supports the asteroid impact hypothesis
- (C) The reason many researchers reject the Alvarez hypothesis
- (D) The responsibility of scientists for not making the effort to discover the asteroid itself

**11. The word “intense” in the passage is closest in meaning to**

- (A) sudden
- (B) unusual
- (C) immediate
- (D) extreme

**12. What is the purpose of paragraph 7 in the passage?**

- (A) It proposes a decisive new test of the Alvarez hypothesis.
- (B) It presents additional supporting evidence for the Alvarez hypothesis.
- (C) It explains why evidence relating to the Alvarez hypothesis is hard to find.
- (D) It shows how recent evidence has raised doubts about the Alvarez hypothesis.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In general, it is believed that these two extinctions resulted from drastic environmental changes that followed meteorite impacts or massive volcanic eruptions.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

There have been many attempts to explain the causes of mass extinctions.

**Answer choices**

- (A) Asteroid impacts, evolutionary developments, and changes in Earth’s climate and in the positions of the continents have all been proposed as possible causes of mass extinctions.
- (B) Researchers have observed 26-million-year cycles in extinction rates of a number of fossil groups that could all be attributed to the same cause.
- (C) According to the Alvarez hypothesis, much of the iridium originally present on Earth was thrown into the atmosphere as a result of an asteroid impact that also caused a mass extinction.
- (D) The unusual distribution of iridium on Earth and the presence of craters and heat-shocked quartz are central to the theory that an asteroid impact caused the late Cretaceous event.
- (E) The collision between Earth and a large asteroid resulted in massive damage and generated enough heat to cause irreversible changes in Earth’s atmosphere.
- (F) There was a particularly large mass extinction that occurred around 250 million years ago at the end of the Permian period, whose cause could not be determined.

### 参考答案与解析

1. 选 **C**。以 mass extinctions 定位至第一句，说大量生物在短时间内灭绝的这种现象叫做大灭绝事件，C 是原文的同义替换，所以是正确答案。70 million 和 250 million 是两次大灭绝事件发生的时间，不是 A 说的七千万年一直在发生，也不是 D 说的每 2500 万年发生一次；B 的 began 和原文的 end 是反的，错。
2. 选 **A**。以 at present 做关键词定位至最后一句，但这段很短，快速扫完后两句之后就有答案，说现代生物灭绝的速度和大灭绝的时候差不多，得出大灭绝现在正在发生，所以原因是灭绝速度相似。
3. 选 **D**。extended 长期的，long 是正确答案。
4. 选 **C**。EXCEPT 题，本段第一句就问原因第二句就开始回答，所以这道题正选比较好。第二句的 warming or cooling 对应 D 答案，正确，不选；changing position 对应 B 答案，正确，不选；最后一句的 habitat destruction 对应 A 答案，正确，不选；只有 C 没有对应，所以 C 错，选。
5. 选 **D**。问全段的，用排除法。A 的 exact causes 做关键词定位至前两句，原文说有很多假设，所以没有准确原因，A 错；B 的 future 原文没说，所以错；C 的一大堆生物做关键词定位至第三句，但原文没说它们是最先遭殃的一群生物，C 错；D 的 land and seas 做关键词定位至倒数第三句，simultaneously 就是 at the same time，正确。
6. 选 **A**。原句说这两个人认为 mass extinction 是重复出现的。正确答案是 A，C 和 D 的错误很容易分辨，因为 C 和 D 的谓语动词 increase 是原文没说到的，所以 C 和 D 都错。B 项颇具迷惑性，但 B 错在将 suggest 和 study 两个动词并列在一起，但原句是先 study，之后才 suggest，虽然没有明确指出 A 的 base on，但先有研究后有结论，这个结论当然与研究有关，所以 A 正确。
7. 选 **B**。以 companion star hypothesis 做关键词定位至最后一句，说 mass extinction 的反复发生支持了 companion star hypothesis，说轨道变形导致一些星体偏离正常轨道，成为陨星掉入地球，原句说屡次发生，所以能够解释 extinction 的频率，答案是 B。
8. 选 **C**。account for 负责，解释，答案 explain。
9. 选 **B**。以人名做关键词定位至第一句，但第一句没说为什么铱测试对验证 A 的假说很有用，往下看，说地球上 Ir 几乎没有，但其他星体含量多很多，同义改写的答案是 B。也就是说如果地球上发现大量 Ir，就说明遭受过撞击。
10. 选 **A**。修辞目的题，看本句先，原句说 Ir 异常支持了撞击说，但还没发现具体的星体。所以 B 说没有 evidence 错，说反了；C 有人 reject 他的观点，还有 D 的 scientists 的责任原文都没说，不选；正确答案是 A，只有 Ir 异常这个间接证据就可以支持撞击说，所以是 indirect evidence。
11. 选 **A**。intense 密集的，D 的 extreme 正确。
12. 选 **B**。问整段的题关注头尾，开头说撞击会留下大坑，又说热量 blabla，结尾说某某地方被认为是撞击发生的地方，所以应该是支持撞击理论，所以 B 的 additional supporting evidence 正确；D 的 doubts 不对；C 说撞击位置很难找到与最后一句相反，错；A 的 test 原文没说。
13. 选 **D**。两个过渡点，分别是代词 these 和名称 two extinctions，根据 two extinctions 可以确定 B 或者 D 是答案，因为 C 前后在叙述两词 extinction，一定不能插入任何句子；但 these 说明待插入句必须放后，所以 D 正确。
14. 选 **ABD**。A 选项对应整个第三段，正确；B 选项对应原文第四段最后一句，正确；C 选项是第六段的一个细节，不选；D 选项对应原文第七段的前两句，正确；E 选项中的 irreversible 与原文说反，原文第五段说 particles settle 之后大气层就会复原，而不是不可逆转，不选；F 选项是第一段中的一个细节，不选。

### 笔记区

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**Glacier Formation**

Glaciers are slowly moving masses of ice that have accumulated on land in areas where more snowfalls during a year than melts. Snow falls as hexagonal crystals, but once on the ground, snow is soon transformed into a compacted mass of smaller, rounded grains. ■ As the air space around them is lessened by compaction and melting, the grains become denser. ■ With further melting, refreezing, and increased weight from newer snowfall above, the snow reaches a granular recrystallized stage intermediate between flakes and ice known as firn. ■ With additional time, pressure, and refrozen meltwater from above, the small firn granules become larger, interlocked crystals of blue glacial ice. ■ When the ice is thick enough, usually over 30 meters, the weight of the snow and firn will cause the ice crystals toward the bottom to become plastic and to flow outward or downward from the area of snow accumulation.

Glaciers are open systems, with snow as the system's input and meltwater as the system's main output. The glacial system is governed by two basic climatic variables: precipitation and temperature. For a glacier to grow or maintain its mass, there must be sufficient snowfall to match or exceed the annual loss through melting, evaporation, and calving, which occurs when the glacier loses solid chunks as icebergs to the sea or to large lakes. If summer temperatures are high for too long, then all the snowfall from the previous winter will melt. Surplus snowfall is essential for a glacier to develop. A surplus allows snow to accumulate and for the pressure of snow accumulated over the years to transform buried snow into glacial ice with a depth great enough for the ice to flow. Glaciers are sometimes classified by temperature as faster-flowing temperate glaciers or as slower-flowing polar glaciers.

Glaciers are part of Earth's hydrologic cycle and are second only to the oceans in the total amount of water contained. About 2 percent of Earth's water is currently frozen as ice. Two percent may be a deceiving figure, however, since over 80 percent of the world's freshwater is locked up as ice in glaciers, with the majority of it in Antarctica. The total amount of ice is even more awesome if we estimate the water released upon the hypothetical melting of the world's glaciers. Sea level would rise about 60 meters. This would change the geography of the planet considerably. In contrast, should another ice age occur, sea level would drop drastically. During the last ice age, sea level dropped about 120 meters.

When snowfalls on high mountains or in polar regions, it may become part of the glacial system. Unlike rain, which returns rapidly to the sea or atmosphere, the snow that becomes part of a glacier is involved in a much more slowly cycling system. Here water may be stored in ice form for hundreds or even hundreds of thousands of years before being released again into the liquid water system as meltwater. In the meantime, however, this ice is not static. **Glaciers move slowly across the land with tremendous energy, carving into even the hardest rock formations and thereby reshaping the landscape as they engulf, push, drag, and finally deposit rock debris in places far from its original location.** As a result, glaciers create a great variety of landforms that remain long after the surface is released from its icy covering.

Throughout most of Earth's history, glaciers did not exist, but at the present time about 10 percent of Earth's land surface is covered by glaciers. Present-day glaciers are found in Antarctica, in Greenland, and at high elevations on all the continents except Australia. In the recent past, from about 2.4 million to about 10,000 years ago, nearly a third of Earth's land area was periodically covered by ice thousands of meters thick. In the much more distant past, other ice ages have occurred.

1. The word **“interlocked”** in the passage is closest in meaning to
  - (A) intermediate
  - (B) linked
  - (C) frozen
  - (D) fully developed
2. According to paragraph 1, which of the following does NOT describe a stage in the development of firn?
  - (A) Hexagonal crystals become larger and interlock to form a thick layer.
  - (B) Snow crystals become compacted into grains.
  - (C) Granules recrystallize after melting, refreezing, and further compaction.
  - (D) Grains become denser owing to reduced air space around them.
3. The word **“match”** in the passage is closest in meaning to
  - (A) measure
  - (B) enlarge
  - (C) approximate
  - (D) equal
4. The word **“transform”** in the passage is closest in meaning to
  - (A) break
  - (B) push
  - (C) change
  - (D) extend
5. According to paragraph 2, surplus snow affects a glacier in all the following ways EXCEPT
  - (A) It provides the pressure needed to cause glacial ice to flow.
  - (B) It offsets losses of ice due to melting, evaporation, and calving.
  - (C) It brings about the formation of firn in the snow it buries.
  - (D) It results in temperate glaciers that are thicker than polar glaciers.
6. Paragraph 2 implies that which of the following conditions produces the fastest moving glaciers?
  - (A) A climate characteristic of the polar regions
  - (B) A thick layer of ice in a temperate climate
  - (C) Long, warm summers
  - (D) Snow, firn, and ice that have been buried for several years
7. The word **“deceiving”** in the passage is closest in meaning to
  - (A) approximate
  - (B) exaggerated
  - (C) unusual
  - (D) misleading
8. Why does the author consider **“the hypothetical melting of the world’s glaciers”**?
  - (A) To contrast the effects of this event with the opposite effects of a new ice age
  - (B) To emphasize how much water is frozen in glaciers
  - (C) To illustrate the disastrous effects of a warming trend
  - (D) To support the claim that glaciers are part of Earth’s hydrologic cycle
9. The discussion in paragraph 3 answers all the following questions EXCEPT
  - (A) Where is most of Earth’s freshwater?
  - (B) What effect would a new ice age have on sea levels?
  - (C) What is the total amount of water in Earth’s oceans?
  - (D) How much of Earth’s water is in ice?
10. The word **“static”** in the passage is closest in meaning to
  - (A) unchanging
  - (B) usable
  - (C) thick
  - (D) harmless

- 11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
- (A) As a glacier moves, it leaves behind rock formations that have been engulfed, pushed, and dragged by the glacier.
  - (B) Glaciers reshape the landscape by carving into rock and transporting the resulting debris to distant locations.
  - (C) Glaciers carve the hardest rock formations with great energy and slowly reshape them into debris.
  - (D) The tremendous energy of slowly moving glaciers transports and finally deposits rock debris into large rock formations.

- 12. According to paragraph 5, in what way is the present time unusual in the history of Earth?**

- (A) There are glaciers.
- (B) More land is covered by glaciers than at anytime in the past.
- (C) There is no ice age.
- (D) No glaciers are found in Australia.

- 13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Firn has the appearance of wet sugar, but it is almost as hard as ice.

**Where would the sentence best fit?**

- 14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Glaciers are part of Earth's hydrologic cycle.

**Answer choices**

- (A) Glaciers, which at present contain 80 percent of Earth's freshwater, form when accumulated snow is compressed and recrystallized into ice over a period of years.
- (B) When there are glaciers on Earth, water is cycled through the glacier system, but the cycle period may be hundreds of thousands of years during periods of ice ages.
- (C) The glacial system is governed by precipitation and temperature in such a way that glaciers cannot form in temperate latitudes.
- (D) When glacial ice reaches a depth of 30 meters, the weight of the ice causes ice crystals at the bottom to flow, and the resulting movement of the glacier carves the landscape.
- (E) If global warming melted the world's glaciers, sea level would rise about 60 meters worldwide.
- (F) Glaciers have had little effect on Earth's surface because only 2 percent of Earth's water is currently contained in glaciers, and there are fewer glaciers now than at most times in the past.

### 参考答案与解析

1. 选 **B**。interlock 连锁，连接，B 的 link 正确。
2. 选 **A**。EXCEPT 题，排除法。A 的 hexagonal crystal 做关键词定位至第二句，但原文没说形成 thick layer，A 错，选；B 的 compact 和 grain 做关键词同样定位至第二句，正确，不选；C 的 granules 定位至倒数第三句，正确，不选；D 的 air space 定位至第三句，正确，不选。
3. 选 **D**。match 匹配，所以 equal 是答案。
4. 选 **C**。transform 形变，所以 C 的 change 正确。
5. 选 **D**。EXCEPT 题，排除法。A 的 pressure 做关键词定位至倒数第二句，正确，不选；B 的三个动名词和定位至第二句，正确，不选；C 的 firm 定位至前一段的倒数第三句，正确，不选；D 的两种 glaciers 定位至最后一句，两者是并列关系，没有谁比谁怎么样，所以 D 错，选。
6. 选 **B**。以 fast moving glaciers 做关键词定位至最后一句，说冰川可以按温度分为快速移动的 temperate 和慢速移动的 polar，所以要快速移动就必须得是 temperate，所以 A 和 C 说反，D 压根儿没提气候的事儿，所以正确答案是 B。
7. 选 **D**。deceiving 欺骗性的，misleading 正确。
8. 选 **B**。修辞目的题，先读修辞点所在句子，说如果考虑到全球冰川融化释放出的水量，这个量是相当惊人的，如果不知道选什么，往前看，但前文仍然是一个例子，所以也不对，中心句说冰川是地球上的仅次于大洋的第二大水源，所以这些无外乎都是在说冰川水很多，答案是 B。
9. 选 **C**。EXCEPT 题，排除法。A 的 freshwater 定位至第三句，原文说 80%，肯定是最大来源了，所以 A 对，不选；B 的 ice age 和 sea level 做关键词定位至最后两句，正确，不选；C 的 total amount 在原文没有对应点，错，选；D 的 ice 和 Earth's water 定位至第二句，正确，不选。
10. 选 **A**。static 静止的，A 的 unchanging 正确。
11. 选 **B**。原句的结构是冰川穿过陆地，carving blabla thereby reshaping blabla，所以 B 正确。A 遗漏了原文 reshaping 这个关键信息，错；C 错，原文 reshape 的是 landscape，答案 reshape 的是石头；D 完全改变了原文结构，错。
12. 选 **A**。以 present time 做关键词定位至第一句，说地球历史上是不存在冰川的，而现在有 10% 的地球表面被冰川覆盖，这就是现在 unusual 的原因，所以答案是 A，有冰川。
13. 选 **C**。firns 一个过渡点足够。以 firns 确定 B 或者 C，但按照逻辑，应该是先说 firn 的形成过程，在说待插入句中的 firn 是什么样，所以答案是 C。
14. 选 **ABD**。A 选项对应原文第一段，正确；B 选项对应原文第四段，正确；C 选项与原文第二段最后一句相反，不选；D 选项对应原文第一段最后一句和第四段的最后两句，正确；E 选项是原文第三段的一个细节，不选；F 选项与原文第四段最后一句相反，不选。

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## Trade and the Ancient Middle East

Trade was the mainstay of the urban economy in the Middle East, as caravans negotiated the surrounding desert, restricted only by access to water and by mountain ranges. This has been so since ancient times, partly due to the geology of the area, which is mostly limestone and sandstone, with few deposits of metallic ore and other useful materials. Ancient demands for obsidian (a black volcanic rock useful for making mirrors and tools) led to trade with Armenia to the north, while jade for cutting tools was brought from Turkistan, and the precious stone lapis lazuli was imported from Afghanistan. One can trace such expeditions back to ancient Sumeria, the earliest known Middle Eastern civilization. Records show merchant caravans and trading posts set up by the Sumerians in the surrounding mountains and deserts of Persia and Arabia, where they traded grain for raw materials, such as timber and stones, as well as for metals and gems.

Reliance on trade had several important consequences. ■ Production was generally in the hands of skilled individual artisans doing piecework under the tutelage of a master who was also the shop owner. ■ In these shops differences of rank were blurred as artisans and masters labored side by side in the same modest establishment, were usually members of the same guild and religious sect, lived in the same neighborhoods, and often had assumed (or real) kinship relationships. ■ The worker was bound to the master by a mutual contract that either one could repudiate, and the relationship was conceptualized as one of partnership. ■

This mode of craft production favored the growth of self-governing and ideologically egalitarian craft guilds everywhere in the Middle Eastern city. These were essentially professional associations that provided for the mutual aid and protection of their members, and allowed for the maintenance of professional standards. The growth of independent guilds was furthered by the fact that surplus was not a result of domestic craft production but resulted primarily from international trading; the government left working people to govern themselves, much as shepherds of tribal confederacies were left alone by their leaders. In the multiplicity of small-scale local egalitarian or quasi-egalitarian organizations for fellowship, worship, and production that flourished in this laissez-faire environment, individuals could interact with one another within a community of harmony and ideological equality, following their own popularly elected leaders and governing themselves by shared consensus while minimizing distinctions of wealth and power.

The mercantile economy was also characterized by a peculiar moral stance that is typical of people who live by trade—an attitude that is individualistic, calculating, risk taking, and adaptive to circumstances. **As among tribespeople, personal relationships and a careful weighing of character have always been crucial in a mercantile economy with little regulation, where one's word is one's bond and where informal ties of trust cement together an international trade network.** Nor have merchants and artisans ever had much tolerance for aristocratic professions of moral superiority, favoring instead an egalitarian ethic of the open market, where steady hard work, the loyalty of one's fellows, and entrepreneurial skill make all the difference. And, like the pastoralists, Middle Eastern merchants and artisans unhappy with their environment could simply pack up and leave for greener pastures—an act of self-assertion wholly impossible in most other civilizations throughout history.

Dependence on long-distance trade also meant that the great empires of the Middle East were built both literally and figuratively on shifting sand. The central state, though often very rich and very populous, was intrinsically fragile, since the development of new international trade routes could undermine the monetary base and erode state power, as occurred when European seafarers circumvented Middle Eastern merchants after Vasco da Gama's voyage around Africa in the late fifteenth century opened up a southern route. The ecology of the region also permitted armed predators to prowl the surrounding barrens, which were almost impossible for a state to control. Peripheral peoples therefore had a great advantage in their dealings with the center, making government authority insecure and anxious.

1. **According to paragraph 1, why has trade been so important throughout the history of the Middle East?**
  - (A) The rare and valuable metals and stones found in Middle Eastern deserts have always been in high demand in surrounding areas.
  - (B) Growing conditions throughout the Middle East are generally poor, forcing Middle Eastern people to depend on imported grain.
  - (C) Many useful and decorative raw materials cannot be found naturally in the Middle East but are available from neighboring regions.
  - (D) Frequent travel, due to limited water supplies in the Middle East, created many opportunities for trade with neighboring societies.
2. **The word “repudiate” in the passage is closest in meaning to**
  - (A) respect
  - (B) reject
  - (C) review
  - (D) revise
3. **According to paragraph 2, how did Middle Eastern shop owners treat their workers?**
  - (A) Workers were ranked according to their skill level, with the most-experienced artisans becoming partial owners of the shop.
  - (B) Shop owners treated different workers differently depending on how much the workers had in common with their masters.
  - (C) Workers were bound to their masters by unbreakable contracts that strictly defined the terms of their partnership.
  - (D) The shop owner worked alongside the workers and often considered them partner and members of the family.
4. **The author includes the information that “surplus was not a result of domestic craft production but resulted primarily from international trading” in order to**
  - (A) support the claim that the mode of production made possible by the craft guilds was very good for trade
  - (B) contrast the economic base of the city government with that of the tribal confederacies
  - (C) provide a reason why the government allowed the guilds to be self-controlled
  - (D) suggest that the government was missing out on a valuable opportunity to tax the guilds
5. **According to paragraph 3, all of the following are true of the Middle Eastern craft guilds EXCEPT**
  - (A) The guilds were created to support workers and to uphold principles of high-quality craft production.
  - (B) Each guild was very large and included members from a broad geographic area.
  - (C) The leaders of the guilds were chosen by popular vote.
  - (D) All guild members were treated as equals.
6. **The word “consensus” in the passage is closest in meaning to**
  - (A) authority
  - (B) responsibility
  - (C) custom
  - (D) agreement
7. **According to paragraph 4, which of the following was NOT necessary for success in the mercantile economy?**
  - (A) Good business sense
  - (B) Reliable associates
  - (C) Family wealth
  - (D) Constant effort
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Tribespeople were comfortable forming personal relationships with merchants, who, like them, were bound by their promises to one another.
  - (B) Because trade was not formally regulated, merchants were careful about whom they trusted and often conducted business with people they knew personally.
  - (C) While trade among merchants relied somewhat on regulation, among tribespeople trade was based on personal relationships and careful character evaluation.
  - (D) Because tribespeople were bound only by their promises to one another, personal relationships were formed only after careful weighing of character.

**9. The word “ethic” in the passage is closest in meaning to**

- (A) set of moral principles (C) economic system  
(B) division of labor (D) test of character

**10. According to paragraph 4, what choice did Middle Eastern merchants and artisans have that many other people have not had?**

- (A) If they were unhappy in the mercantile environment, they could draw on personal connections to find a different kind of work.  
(B) They were allowed to assert their opinions without having to listen to aristocratic professions of moral superiority.  
(C) Following the example of the pastoralists, they could demand, and receive, better working conditions.  
(D) If they didn't like their environment, they could move somewhere else.

**11. The word “intrinsically” in the passage is closest in meaning to**

- (A) fundamentally (C) consequently  
(B) surprisingly (D) particularly

**12. In paragraph 5, why does the author mention the new trade route opened up by Vasco da Gama's fifteenth century voyage around Africa?**

- (A) To provide evidence that European seafarers took every opportunity to bypass Middle Eastern merchants  
(B) To present an instance in which Middle Eastern states lost money and power because of their reliance on long-distance trade  
(C) To argue this new route became necessary when European seafarers wanted to avoid Middle Eastern states whose central power had begun to erode  
(D) To explain how da Gama helped European traders avoid the dangerous predators prowling the areas surrounding Middle Eastern cities

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

For one thing, it created a demand for finished goods to be sold both locally and abroad.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Since ancient times, reliance on trade has shaped the culture and organizational structure of Middle Eastern societies.

**Answer choices**

- (A) Persian and Arabian merchants traveled great distances to sell their finished goods at the marketplaces of ancient Sumeria.  
(B) Revenue from trade was unevenly distributed, causing Middle Eastern societies to be characterized by growing distinctions in wealth and power.  
(C) Qualities that were valued in the mercantile economy included individualism, hard work, loyalty, and the willingness to take risks.  
(D) As production increased, centralized control over production also increased, leading in turn to more-centralized control over fellowship and worship.  
(E) Crafts were produced by skilled artisans working in close, egalitarian relationships with their masters and other fellow guild members.  
(F) The stability of Middle Eastern governments was threatened by their lack of control over international trade patterns and over their own peripheral territories.

### 参考答案与解析

1. 选 **C**。问 trade 为什么主要，这段第一句就说是 mainstay，第二句就给出了原因，说他们没有这个没有那个，所以答案是 C。A 说中东有 material，明显与原文说反；B 的中东很穷和 D 的 frequent travel 原文都没说。
2. 选 **B**。repudiate 拒绝接受，所以 reject 正确。
3. 选 **D**。以 shop owners 做关键词定位至第二句，但第二句没有回答问题，所以往后看，后一句说老板和工人之间的界限被 blur 了，而且他们同吃同住一起工作，所以答案是 D。A 的 workers rank 原文没说；B 说对不同工人态度不同，与原文相反；C 的 unbreakable contract 与最后一句相反。
4. 选 **C**。修辞目的题，先看修辞点所在句子，只是一个例子，放弃；往前看，说有行业协会互助互惠，但这明显也还是一个例子，所以看本段中心句，说这种生产方式倾向于促进自律平等的同业协会的发展，所以答案是 C。
5. 选 **B**。EXCEPT 题，排除法。A 的 support workers 和 uphold principles 定位至第二句，原文的 mutual aid and protection 等于 support workers, maintenance of professional standards 等于 uphold principles，A 正确，不选；B 的 geographic area 原文没有对应点，错，选；C 的 vote 做关键词定位至最后一句，正确，不选；D 的 equals 做关键词定位至最后一句，正确，不选。
6. 选 **D**。consensus 协定，D 的 agreement 正确。
7. 选 **C**。EXCEPT 题，排除法。A 与倒数第二句的 entrepreneurial skill 同义替换，正确，不选；B 与倒数第二句的 loyalty of one's fellow 同义替换，正确，不选；C 在原文中无对应点，错，选；D 与倒数第二句的 steady hard work 同义替换，正确，不选。
8. 选 **B**。原句的结构是在什么人当中，什么和什么很重要，在什么环境下。所以 B 正确。A 混淆原文概念，原文说在当时的环境下只能靠 promise 形成商业网络，人们和认识的人做生意，不是人们靠 promise 做生意；C 错，原文说没有 regulation，C 说反；D 错，因为 only 原文从来没见过。
9. 选 **A**。ethic 道德规范，伦理，所以 A 正确。
10. 选 **D**。以 many other people 做关键词定位至最后一句，说如果不满意当地的商业环境，中东商人会像游牧民族一样迁移到其他地方，这是其他人做不到的，所以答案是 D。
11. 选 **A**。intrinsically 本质的，所以答案 A 正确。
12. 选 **B**。修辞目的题，先把本句读清楚，说新的国际贸易路线可以决定金融资本所在的地方，并且能够侵蚀国家的力量，接着就说就像达伽马发现了新航路之后欧洲人绕过了中东，所以说达伽马的事儿是为了证明航线的发现能够削弱国家的力量，所以答案是 B。
13. 选 **A**。两个过渡点，连词 for one thing 和名词 finished goods，既然是 for one thing，就应该放在比较靠前的位置上，所以 A 或者 B 有可能，而放在 A 正好对应之前的 several important consequences；而且 finished goods 与原文当中的 production 对应，所以 A 正确。
14. 选 **CEF**。A 选项是原文第一段中的细节，不选；B 选项与原文第三段最后一句说反，是贫富差距缩小，不是扩大，不选；C 选项对应第四段，正确；D 选项与原文第三段第一句相反，不选；E 选项对应原文第二段和第三段的最后一句，正确；F 选项对应原文第五段第一句，正确。

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**Development of the Periodic Table**

The periodic table is a chart that reflects the periodic recurrence of chemical and physical properties of the elements when the elements are arranged in order of increasing atomic number (the number of protons in the nucleus). It is a monumental scientific achievement, and its development illustrates the essential **interplay** between observation, prediction, and testing required for scientific progress. In the 1800's scientists were searching for new elements. By the late 1860's more than 60 chemical elements had been identified, and much was known about their descriptive chemistry. Various proposals were put forth to arrange the elements into groups based on similarities in chemical and physical properties. ■ The next step was to recognize a connection between group properties (physical or chemical similarities) and atomic mass (the measured mass of an individual atom of an element). ■ When the elements known at the time were ordered by increasing atomic mass, it was found that successive elements belonged to different chemical groups and that the order of the groups in this sequence was fixed and repeated itself at regular intervals. ■ Thus when the series of elements was written so as to begin a new horizontal row with each alkali metal, elements of the same groups were automatically assembled in vertical columns in a periodic table of the elements. ■ This table was the forerunner of the modern table.

When the German chemist Lothar Meyer and (independently) the Russian Dmitry Mendeleyev first introduced the periodic table in 1869–70, one-third of the naturally occurring chemical elements had not yet been discovered. Yet both chemists were sufficiently farsighted to leave gaps where their analyses of periodic physical and chemical properties indicated that new elements should be located. **Mendeleyev was bolder than Meyer** and even assumed that if a measured atomic mass put an element in the wrong place in the table, the atomic mass was wrong. In some cases this was true. Indium, for example, had previously been assigned an atomic mass between those of arsenic and selenium. Because there is no space in the periodic table between these two elements, Mendeleyev suggested that the atomic mass of indium be changed to a completely different value, where it would fill an empty space between cadmium and tin. In fact, subsequent work has shown that in a periodic table, elements should not be ordered strictly by atomic mass. For example, tellurium comes before iodine in the periodic table, even though its atomic mass is slightly greater. Such anomalies are due to the relative **abundance** of the "isotopes" or varieties of each element. All the isotopes of a given element have the same number of protons, but differ in their number of neutrons, and hence in their atomic mass. The isotopes of a given element have the same chemical properties but slightly different physical properties. We now know that atomic number (the number of protons in the nucleus), not atomic mass number (the number of protons and neutrons), determines chemical behavior.

Mendeleyev went further than Meyer in another respect: he predicted the properties of six elements yet to be discovered. For example, a gap just below aluminum suggested a new element would be found with properties **analogous to** those of aluminum. Mendeleyev designated this element "eka-aluminum" (eka is the Sanskrit word for "next") and predicted its properties. Just five years later an element with the proper atomic mass was isolated and named gallium by its discoverer. The close correspondence between the observed properties of gallium and Mendeleyev's predictions for eka-aluminum lent strong support to the periodic law. Additional support came in 1885 when eka-silicon, which had also been described in advance by Mendeleyev, was discovered and named germanium.

The structure of the periodic table appeared to limit the number of possible elements. It was therefore quite surprising when John William Strut (Lord Rayleigh, discovered a gaseous element in 1894 that did not fit into the previous classification scheme. A century earlier, Henry Cavendish had noted the existence of a residual gas when oxygen and nitrogen are removed from air, but its importance had not been realized. Together with William Ramsay, Rayleigh isolated the gas (separating it from other substances into its pure state) and named it argon. **Ramsay then studied a gas that was present in natural gas deposits and discovered that it was helium, an element whose presence in the Sun had been noted earlier in the spectrum of sunlight but that had not previously been known on Earth.** Rayleigh and Ramsay **postulated** the existence of a new group of elements, and in 1898 other members of the series (neon, krypton, and xenon) were isolated.

1. The phrase “interplay” in the passage is closest in meaning to
  - (A) sequence
  - (B) interpretation
  - (C) requirement
  - (D) interaction
2. According to paragraph 1, what pattern did scientists notice when the known elements were written in order of increasing atomic mass?
  - (A) The elements of the group of alkali metals were the first elements in the order of increasing atomic mass.
  - (B) Repetition of the same atomic masses for elements in different groups appeared.
  - (C) Elements with similar chemical properties appeared in the listing at regular intervals.
  - (D) Elements were chemically most similar to those just before and after them in the order.
3. In paragraph 2, what is the author’s purpose in presenting the information about the decision by Meyer and Mendeleyev to leave gaps in the periodic table?
  - (A) To illustrate their confidence that the organizing principles of the periodic table would govern the occurrence of all chemical elements
  - (B) To indicate that some of their analyses of periodic physical and chemical properties were later found to be wrong
  - (C) To support the idea that they were unwilling to place new elements in the periodic table
  - (D) To indicate how they handled their disagreement about where to place new elements
4. What reason does the author provide for the claim that “Mendeleyev was bolder than Meyer”?
  - (A) Mendeleyev corrected incorrect information Meyer had proposed.
  - (B) Mendeleyev assumed that some information believed to be true about the elements was incorrect.
  - (C) Mendeleyev argued that Meyer had not left enough gaps in the periodic table.
  - (D) Mendeleyev realized that elements were not ordered by atomic mass in the periodic table.
5. According to paragraph 2, why did Mendeleyev suggest changing the atomic mass of indium?
  - (A) Because indium did not fit into the periodic table in the place predicted by its atomic mass.
  - (B) Because there was experimental evidence that the atomic mass that had been assigned to indium was incorrect.
  - (C) Because there was an empty space between cadmium and tin in the periodic table.
  - (D) Because the chemical properties of indium were similar to those of arsenic and selenium.
6. It can be inferred from paragraph 2 that tellurium comes before iodine in the periodic table even though tellurium’s atomic mass is slightly greater because
  - (A) iodine is less common than tellurium
  - (B) both iodine and tellurium have no isotopes
  - (C) the chemical behavior of tellurium is highly variable
  - (D) the atomic number of tellurium is smaller than that of iodine
7. The phrase “abundance” in the passage is closest in meaning to
  - (A) weight
  - (B) requirement
  - (C) plenty
  - (D) sequence
8. The phrase “analogous to” in the passage is closest in meaning to
  - (A) predicted by
  - (B) expected of
  - (C) similar to
  - (D) superior to
9. Paragraph 3 suggests that Mendeleyev predicted the properties of eka-aluminum on the basis of
  - (A) the atomic mass of aluminum
  - (B) the position of the gap in the periodic table that eka-aluminum was predicted to fill
  - (C) the similarity of eka-aluminum to the other five missing elements
  - (D) observation of the properties of gallium

**10. It can be inferred from paragraph 3 that the significance of the discovery of gallium was that it supported which of the following?**

- (A) The idea that aluminum was correctly placed in the periodic table.
- (B) Mendeleyev's prediction that eka-silicon would be discovered next.
- (C) The organizing principle of the periodic table.
- (D) The idea that unknown elements existed.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Ramsay found evidence of helium in the spectrum of sunlight before he discovered that the element was also contained in natural gas deposits on Earth.
- (B) Ramsay thought he had discovered a new element present in natural gas deposits, but he was wrong since that element had been previously observed elsewhere on Earth.
- (C) After Ramsay had discovered a new element, called helium, in natural gas deposits on Earth, he also found evidence of its presence in the Sun.
- (D) Ramsay later discovered that helium, an element that was already known to be present in the Sun, was also present in natural gas deposits on Earth.

**12. The word "postulated" in the passage is closest in meaning to**

- (A) hypothesized
- (B) discovered
- (C) reported
- (D) generated

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

It was a natural idea to break up the series of elements at the points where the sequence of chemical groups to which the elements belonged began to repeat itself.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The periodic table introduced by Meyer and Mendeleyev was the forerunner of the modern table of elements.

**Answer choices**

- (A) Lord Rayleigh provided evidence that the structure of the periodic table limited the potential number of elements.
- (B) Mendeleyev and Meyer organized the known elements into a chart that revealed periodic recurrences of chemical and physical properties.
- (C) Mendeleyev's successful prediction of the properties of then- unknown elements lent support to the acceptance of the periodic law.
- (D) Ramsay and Lord Rayleigh challenged the importance of the chemical research that Henry Cavendish had done a century earlier.
- (E) Isotopes of a given element have exactly the same physical properties, but their chemical properties are slightly different.
- (F) In the 1890's, Ramsay and Lord Rayleigh isolated argon and proposed the existence of a new series of elements.

### 参考答案与解析

1. 选 **D**。interplay 相互作用，interaction 正确。
2. 选 **C**。以 increasing atomic mass 做关键词定位至倒数第三句，说把元素按照原子量增加的顺序排布，发现相邻元素属于不同的族，族的顺序是固定的，每隔固定数量的元素会重现。所以正确答案是 C。A 的 alkali metals，B 的 same atomic mass 原文都没说；D 说相邻元素性质相近与原文相反。
3. 选 **A**。修辞目的题，先找到两个人名，说两个人都非常有远见，在周期表中给没发现的元素留了空隙，也就是 A 说的他们足够自信认为元素周期律适用于所有元素；B 的 wrong 和 C 的 unwilling 都跟原文说反；D 的 disagreement 原文没说。
4. 选 **B**。修辞目的题，先找到两个人名，说门捷列夫比梅伊尔更胆儿大，他推测如果用来在周期表中排序的原子量与元素周期律互相冲突的时候，就说明原子量错了，也就是选项 B 说的门捷列夫认为以前被大家所认识到的一些东西是错的。两个人的意见是一样的，只是门捷列夫更进一步，所以 A 和 C 说两者的意见有差异不对；D 说不是按原子量排序的错。
5. 选 **A**。以 changing the atomic mass of indium 做关键词定位至第六句，说由于元素周期表中砷和硒之间没有空位，所以铟的原子量是错的。因为前面说如果原子量把元素放错了位置，就说明原子量是错的，后一句是为了证明这个观点的，所以答案是 A。B 的 experimental evidence 和 D 的化学性质相似原文都没说；C 有 space 与原文相反。
6. 选 **D**。以 tellurium comes before iodine 做关键词定位至倒数第五句 for example 处，但这句话只是一个例子，所以往前看，说元素不应该严格按照原子量排列，而且最后一句又说决定元素化学性质的是原子序数，不是原子量，也就应该是按照原序数量排列，所以答案 D 正确。A 谁 common 谁不 common，B 有没有同位素还有 C 的化学性质多变没有信息能推出。
7. 选 **C**。abundance 丰度，答案是 plenty。
8. 选 **C**。analogous to 相似的，similar to 正确。
9. 选 **B**。以 eka-aluminum 定位至第三句，但这句话只说了预测了 eka 的性质，没说根据什么预测的，看上一句，说 eka 是铝之下的那个空格里的元素，而且跟铝性质相似，所以答案是 B，eka 要填的那个空格。A 铝的原子量 C 另外五个没发现的元素 D 的 gallium 原文都没说。
10. 选 **C**。gallium 做关键词定位至倒数第三句，但这句话只是说命名为 Ga，没说支持什么，往下看说 Ga 的发现支持了元素周期律，而问题刚好是问 Ga 的发现支持了什么，所以答案是 C，元素周期表的组成规律，也就是元素周期律。
11. 选 **D**。原文的结构是 R 研究了一种气体，并且发现这种气体是氦，所以答案是 D。A 完全搞乱了原文的结构，氦在太阳光谱中不是 R 发现的；B 的转折关系错；C 和 A 的错误相似，氦在太阳光谱中不是 R 发现的。
12. 选 **A**。postulate 推断，所以 hypothesize 正确。
13. 选 **C**。三个过渡点分别是 chemical groups，名词 sequence 和动词词组 repeat itself，这几个点都可以确定 B 或者 C 是答案，但 B 前后的 atomic mass 说明两句话的过渡是非常紧密的，所以 B 被排除，答案是 C。
14. 选 **DEF**。A 选项错，原文没说他的研究提供了元素周期表限制元素数量的证据，不选；B 选项错，原文没说他们俩挑战了卡文迪许，不选；C 选项是原文第二段中的一个细节，不选；D 选项对应原文第一段后半部分，正确；E 选项对应原文第三段最后两句，正确；F 选项对应全文最后一句话，正确。

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**Planets in Our Solar System**

The Sun is the hub of a huge rotating system consisting of nine planets, their satellites, and numerous small bodies, including asteroids, comets, and meteoroids. An estimated 99.85 percent of the mass of our solar system is contained within the Sun, while the planets collectively make up most of the remaining 0.15 percent. The planets, in order of their distance from the Sun, are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto. Under the control of the Sun's gravitational force, each planet maintains an elliptical orbit and all of them travel in the same direction.

The planets in our solar system fall into two groups: the terrestrial (Earth-like) planets (Mercury, Venus, Earth, and Mars) and the Jovian (Jupiter-like) planets (Jupiter, Saturn, Uranus, and Neptune). Pluto is not included in either category, because its great distance from Earth and its small size make this planet's true nature a mystery.

The most obvious difference between the terrestrial and the Jovian planets is their size. The largest terrestrial planet, Earth has a diameter only one quarter as great as the diameter of the smallest Jovian planet, Neptune, and its mass is only one seventeenth as great. Hence, the Jovian planets are often called giants. Also, because of their relative locations, the four Jovian planets are known as the outer planets, while the terrestrial planets are known as the inner planets. There appears to be a correlation between the positions of these planets and their sizes.

Other dimensions along which the two groups differ **markedly** are density and composition. The densities of the terrestrial planets average about 5 times the density of water, whereas the Jovian planets have densities that average only 1.5 times the density of water. One of the outer planets, Saturn, has a density of only 0.7 that of water, which means that Saturn would float in water. Variations in the composition of the planets are largely responsible for the density differences. ■ The substances that make up both groups of planets are divided into three groups—gases, rocks, and ices—based on their melting points. ■ The terrestrial planets are mostly rocks: dense rocky and metallic material, with minor amounts of gases. ■ The Jovian planets, on the other hand, contain a large percentage of the gases hydrogen and helium, with varying amounts of ices: mostly water, ammonia, and methane ices. ■

The Jovian planets have very thick atmospheres consisting of varying amounts of hydrogen, helium, methane, and ammonia. By comparison, the terrestrial planets have **meager** atmospheres at best. A planet's ability to retain an atmosphere depends on its temperature and mass. Simply stated, a gas molecule can "evaporate" from a planet if it reaches a speed known as the escape velocity. For Earth, this velocity is 11 kilometers per second. Any material, including a rocket, must reach this speed before it can leave Earth and go into space. The Jovian planets, because of their greater masses and thus higher surface gravities, have higher escape velocities (21–60 kilometers per second) than the terrestrial planets. Consequently, it is more difficult for gases to "evaporate" from them. Also, because the molecular motion of a gas depends on temperature, at the low temperatures of the Jovian planets even the lightest gases are unlikely to acquire the speed needed to escape. On the other hand, a comparatively warm body with a small surface gravity, like Earth's moon, is unable to hold even the heaviest gas and thus lacks an atmosphere. The slightly larger terrestrial planets Earth, Venus, and Mars retain some heavy gases like carbon dioxide, but even their atmospheres make up only an infinitesimally small portion of their total mass.

The orderly nature of our solar system leads most astronomers to conclude that the planets formed at essentially the same time and from the same material as the Sun. It is hypothesized that the **primordial** cloud of dust and gas from which all the planets are thought to have condensed had a composition somewhat similar to that of Jupiter. However, unlike Jupiter, the terrestrial planets today are nearly void of light gases and ices. The explanation may be that the terrestrial planets were once much larger and richer in these materials but **eventually** lost them because of these bodies' relative closeness to the Sun, which meant that their temperatures were relatively high.

1. **According to the passage, each of the following statements comparing terrestrial planets with Jovian planets is true EXCEPT**
  - (A) Terrestrial planets are closer to the Sun than Jovian planets.
  - (B) Terrestrial planets have smaller diameters than Jovian planets.
  - (C) Terrestrial planets have smaller masses than Jovian planets.
  - (D) Terrestrial planets travel in a different direction than Jovian planets do.
2. **The word “markedly” in the passage is closest in meaning to**
  - (A) essentially
  - (B) typically
  - (C) consistently
  - (D) noticeably
3. **Paragraph 4 mentions which of the following as a reason why terrestrial planets are dense?**
  - (A) They are made up of three groups of substances.
  - (B) They are composed mainly of rocky and metallic materials.
  - (C) They contain more ice than Jovian planets.
  - (D) They contain relatively small amounts of water.
4. **Paragraph 4 supports each of the following statements about Saturn EXCEPT**
  - (A) It is less dense than any of the terrestrial planets.
  - (B) It contains no rocky material.
  - (C) It contains ices.
  - (D) It contains a large percentage of gases.
5. **The word “meager” in the passage is closest in meaning to**
  - (A) rich
  - (B) thin
  - (C) unique
  - (D) complex
6. **According to paragraph 5, which of the following statements is true of both Jovian and terrestrial planets?**
  - (A) The thicker the atmosphere, the smaller the planet’s mass
  - (B) The more varied the gases in the atmosphere, the higher the temperature
  - (C) The higher the surface gravity, the higher the escape velocity
  - (D) The less the atmosphere contributes to the total mass, the lower the temperature
7. **According to paragraph 5, what is a major reason that Jovian planets have much thicker atmospheres than terrestrial planets do?**
  - (A) Jovian planets have lower surface gravities
  - (B) Jovian planets have lower temperatures
  - (C) Jovian planets have lower escape velocities
  - (D) Jovian planets’ gas molecules have higher average speeds
8. **Paragraph 5 supports which of the following statements about the ability of planets to retain gases?**
  - (A) More-massive planets are less able to retain gases than less-massive ones.
  - (B) Planets are more likely to retain heavy gases than light gases.
  - (C) Jovian planets are unlikely to retain the lightest gases.
  - (D) Only terrestrial planets have been able to retain carbon dioxide.
9. **In calling the cloud of gas and dust from which the Sun and all the planets are thought to have condensed “primordial,” the author means that the cloud was**
  - (A) immense in size
  - (B) composed of similar particles
  - (C) present at the very beginning of our solar system’s formation
  - (D) created from a great variety of different materials
10. **The word “eventually” in the passage is closest in meaning to**
  - (A) over time

- (B) long ago
- (C) simply
- (D) certainly

**11. According to paragraph 6, what is a possible explanation for the lack of light gases and ices on terrestrial planets?**

- (A) The location of terrestrial planets caused them to lose some of the materials they once contained.
- (B) Terrestrial planets were formed much later than Jovian planets.
- (C) The composition of terrestrial planets was different from that of Jupiter.
- (D) Terrestrial planets were formed out of different material than the Sun was.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This explains their relatively low densities.

**Where would the sentence best fit?**

**13. Directions: From the seven answer choices below, select the two phrases that correctly characterize the terrestrial planets and the three phrases that correctly characterize the Jovian planets. Drag each phrase you select into the appropriate column of the table. Two of the phrases will NOT be used. This question is worth 3 points.**

terrestrial planets (TWO):
----------------------------

Jovian planets (THREE):
-------------------------

**Answer choices**

- (A) Have relatively small sizes
- (B) Are grouped in the same category as Pluto
- (C) Contain relatively high proportions of ices
- (D) Have relatively high temperatures
- (E) Have densities that are generally lower than the density of water
- (F) Have relatively high escape velocities
- (G) Have a composition closer to that of the cloud from which they condensed terrestrial

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## 参考答案与解析

1. 选 **D**。EXCEPT 题，排除法，问整个文章，所以应该关注各段的开头。第二段提到了分成两类，第三四两段叙述区别；A 的 closer 做关键词定位至第三段倒数第二句，正确，不选；B 的 diameter 做关键词定位至第三段第二句，正确，不选；C 的 smaller masses 做关键词定位至第三段第一句的 size，正确，不选；D 与原文第一段末句相反，错，选。
2. 选 **D**。markedly 显著的，答案是 noticeably。
3. 选 **B**。以 dense 做关键词定位至第一句，但这句只是单纯说类地行星比类木行星密度大，没给出原因，正确答案在第三句的 density difference，说组成物质的不同导致两者密度的差异，所以答案是 B，主要由金属和岩石构成。A 不是原因，C 说反，D 没说。
4. 选 **B**。EXCEPT 题，排除法，A 的 dense 做关键词定位至第一和第二句，说类地行星的密度大致是水的五倍，土星是水的 0.7 倍，所以 A 说土星比任何类地行星密度都小正确，不选；B 的 rocky material 做关键词定位至倒数两句，说类地行星主要由石质物质组成，类木行星主要由气态物质组成，没说土星所属的类木行星没有石质物质，错，选；同时证明 C 和 D 正确，不选。
5. 选 **B**。meager 稀少的，所以答案 B 正确。
6. 选 **C**。因为同时问到两种星星，所以不能单独找任何一种，接着刚才的题往下看，说行星保持大气的的能力取决于其温度和体积，下面分述了体积越大，温度越低，气体越难以逃离，也就是逃逸速度越大，大气层越厚。所以 A 和 D 说反，B 没说，答案是 C。正选不会的话可以用排除法。
7. 选 **B**。接上题，类木行星体积大，温度低，引力大，逃逸速度大，所以 A 和 C 说反；B 正确。原文倒数第三句说气体分子的运动速度取决于温度，温度越低，分子的运动速度越小，所以 D 和 B 事实上是反的，所以 D 也说反了。
8. 选 **B**。接上题，类木行星体积大，温度低，引力大，逃逸速度大，更容易有厚的大气层，所以 A 和 C 说反了；而 D 明显不对，所以答案是 B。
9. 选 **C**。修辞目的题，修辞点所在句子只是说了一个事实，所以往前看，前一句说太阳系形成的有序性使得天文学家相信太阳系和太阳本身是同时形成的。既然是有序性，后文肯定要开始说这个顺序了，所以答案是 C，太阳系形成最初的时候，而且整个段一直在强调时间概念，所以 C 正确。
10. 选 **A**。eventually 最终，A 的 over time 正确。
11. 选 **A**。以 lack of gases and ices 做关键词定位至倒数第二句，这句话只是单纯说现象，最后一句才是解释，而且这句话刚才已经讲过，说由于距离太阳近，类地行星最终失去了这些气态物质，所以答案是 A。其余答案与本段首句说反。
12. 选 **D**。三个过渡点，分别为代词 this，动词 explain 所表达的因果关系和名词 low density；原文倒数第二句说类地行星密度大，接着就说类木行星密度小，对应 low density，是个不太容易识别的同义替换，所以 C 或者 D 是答案，因果关系证明 D 正确。
13. terrestrial planets 选 **AD**；Jovian planets 选 **CFG**。这篇文章是两个方面的叙述的，需要注意，第三四五段分别叙述了类地行星和类木行星的区别，主要在 size, density, composition 等几个方面。A 选项对应第三段第二句，应该属于类地行星的；C 选项对应第四段最后一句，属于类木行星的；D 选项对应第五段第三句，温度越高，逃逸速度越小，聚集气体的能力越差，所以应该属于类地行星的；E 选项有一定迷惑性，原文第四段说类地行星密度大，类木行星密度小，说的是类木行星的平均密度是水的 1.5 倍，只有土星比水小，所以这个选项是错的，不属于任何一类；F 对应第五段的第三四两句，属于类木行星；G 选项对应原文第六段第二句，属于类木行星。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Europe's Early Sea Trade with Asia

In the fourteenth century, a number of political developments cut Europe's overland trade routes to southern and eastern Asia, with which Europe had had important and highly profitable commercial ties since the twelfth century. This development, coming as it did when the bottom had fallen out of the European economy, provided an **impetus** to a long-held desire to secure direct relations with the East by establishing a sea trade. Widely reported, if somewhat distrusted, accounts by figures like the famous traveler from Venice, Marco Polo, of the willingness of people in China to trade with Europeans and of the immensity of the wealth to be gained by such contact made the idea irresistible. Possibilities for trade seemed promising, but no hope existed for maintaining the traditional routes over land. A new way had to be found.

The chief problem was technological: How were the Europeans to reach the East? Europe's maritime tradition had developed in the context of easily navigable seas—the Mediterranean, the Baltic, and, to a lesser extent, the North Sea between England and the Continent—not of vast oceans. New types of ships were needed, new methods of finding one's way, new techniques for financing so vast a scheme. **The sheer scale of the investment it took to begin commercial expansion at sea reflects the immensity of the profits that such East-West trade could create.** ■ Spices were the most sought-after commodities. ■ Spices not only dramatically improved the taste of the European diet but also were used to manufacture perfumes and certain medicines. ■ But even high-priced commodities like spices had to be transported in large bulk in order to justify the expense and trouble of sailing around the African continent all the way to India and China. ■

The principal seagoing ship used throughout the Middle Ages was the galley, a long, low ship fitted with sails but driven primarily by oars. The largest galleys had as many as 50 oarsmen. Since they had relatively shallow hulls, they were unstable when driven by sail or when on rough water: hence they were unsuitable for the voyage to the East. Even if they hugged the African coastline, they had little chance of surviving a crossing of the Indian Ocean. Shortly after 1400, shipbuilders began developing a new type of vessel properly designed to operate in rough, open water: the caravel. It had a wider and deeper hull than the galley and hence could carry more cargo: increased stability made it possible to add multiple masts and sails. In the largest caravels, two main masts held large square sails that provided the bulk of the thrust driving the ship forward, while a smaller forward mast held a triangular-shaped sail, called a lateen sail, which could be moved into a variety of positions to maneuver the ship.

The astrolabe had long been the primary instrument for navigation, having been introduced in the eleventh century. It operated by measuring the height of the Sun and the fixed stars: by calculating the angles created by these points, it determined the degree of latitude at which one stood (The problem of determining longitude, though, was not solved until the eighteenth century.) By the early thirteenth century, Western Europeans had also **developed and put into use the magnetic compass**, which helped when clouds obliterated both the Sun and the stars. Also beginning in the thirteenth century, there were new maps **refined** by precise calculations and the reports of sailors that made it possible to trace one's path with reasonable accuracy. Certain institutional and practical **norms** had become established as well. A maritime code known as the Consulate of the Sea, which originated in the western Mediterranean region in the fourteenth century, won acceptance by a majority of sea goers as the normative code for maritime conduct; it defined such matters as the authority of a ship's officers, protocols of command, pay structures, the rights of sailors, and the rules of engagement when ships met one another on the sea-lanes. Thus by about 1400 the key elements were in place to enable Europe to begin its seaward adventure.

1. The word **"impetus"** in the passage is closest in meaning to
  - (A) return
  - (B) opportunity
  - (C) stimulus
  - (D) obstacle
2. According to paragraph 1 why was it necessary to find a new way for European merchants to reach the East?
  - (A) People in China were finally ready to trade with Europeans
  - (B) The European economy was failing because there was no trade with the East
  - (C) Traditional ways of trading with the East had become very costly
  - (D) Commercial routes over land had become blocked because of political events
3. According to paragraph 2, what was the main difficulty Europeans had to overcome in order to develop a new way of trading with the East?
  - (A) Europeans were unwilling to invest in large-scale commercial ventures.
  - (B) Europeans lacked the means for navigating long distances across oceans.
  - (C) Europeans were unwilling to experiment with new business techniques.
  - (D) Europeans lacked knowledge about the commercial methods of other peoples.
4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The high cost to investors of developing trade by sea between East and West indicates the great size of the profits that such trade could produce.
  - (B) The profits that could be created by sea trade between East and West were immense compared with the investment required to develop such trade.
  - (C) The increase in commercial activity by using sea routes reflects the importance trade between East and West had for investors seeking great profits.
  - (D) Because people made large investments in sea commerce between East and West. They expected to make immense profits.
5. The word **"dramatically"** in the passage is closest in meaning to
  - (A) artificially
  - (B) greatly
  - (C) immediately
  - (D) regularly
6. It can be inferred from paragraph 2 that spices from Asia were desirable in Europe in the Middle Ages because they
  - (A) were easily transported in large quantities
  - (B) could not be produced in European countries
  - (C) could be traded for products such as perfumes and medicines
  - (D) were expected to increase in value over time
7. According to paragraph 3, all of the following statements comparing the caravel with the galley are true EXCEPT
  - (A) The caravel had fewer masts than the galley.
  - (B) The caravel had a wider hull than the galley.
  - (C) The caravel could carry more cargo than the galley.
  - (D) The caravel was more stable in rough water than the galley.
8. According to paragraph 3, what did the lateen sail contribute to the caravel as a sailing ship?
  - (A) It provided stability for the front part of the ship.
  - (B) It made it possible for the hull to be wider and deeper.
  - (C) It added considerably to the speed of the wind-driven ship.
  - (D) It improved the capacity of the ship to be guided.
9. Why does the author include the information that Western Europeans had **"developed and put into use the magnetic compass"**?

- (A) To provide an example of an instrument that was developed after caravels had begun traveling across oceans
- (B) To provide an example of an improvement that resulted directly from the invention of the astrolabe
- (C) To identify one of the technological advances that made sea trade with the East possible
- (D) To explain how the problem of determining longitude was solved

**10. The word “refined” in the passage is closest in meaning to**

- (A) completed
- (B) improved
- (C) drawn
- (D) checked

**11. The word “norms” in the passage is closest in meaning to**

- (A) purposes
- (B) skills
- (C) activities
- (D) rules

**12. According to paragraph 4, which of the following is true of the maritime code developed in Europe in the fourteenth century?**

- (A) It mapped out lanes in the seas for trading ships to follow.
- (B) It defined the ways in which people should behave at sea.
- (C) It replaced an earlier code that could not be adapted to the sea trade with the East.
- (D) It gave instructions on how to navigate a ship.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

They were highly valued for a couple of reasons.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Because land routes to Asia had been cut off in the fourteenth century, Europeans had to find a new way to trade with Asia.

**Answer choices**

- (A) Reports by travelers indicated that people in Asia were interested in renewing trade with Europeans.
- (B) For trade in Asian goods such as spices to be profitable, these items needed to be transported in large quantities by sea.
- (C) European galleys were able to bring Asian goods across with these items needed to be transported in large quantities by Indian Ocean and around the African coastline.
- (D) Wind-driven caravels were developed to carry cargo across the oceans.
- (E) The development of maps, navigational instruments, and a maritime code of conduct provided crucial elements for long-distance navigation.
- (F) Europeans wanted to import spices from Asia in order to improve the taste of food and to make perfumes and medicines.

## 参考答案与解析

1. 选 **C**。impetus 推动，所以 C 的 stimulus 正确。
2. 选 **D**。以 a new way 做关键词定位至最后一句，这句信息太少，所以往前看，前句说没法维持传统的陆路贸易，但还是没说为什么，这时候可以使用排除法，也可以去看这段的开头，开头说政治因素切断了陆路贸易，所以答案是 D。
3. 选 **B**。以 main difficulty 定位至第一句，说主要的问题是技术问题，西方人怎么到达东方，也就是航行技术问题，而且接着也说欧洲传统的航路是在哪里，所以答案是 B。欧洲人非常想与亚洲人贸易，所以 A 和 C 的 unwilling 说错；D 的 commercial methods 没说。
4. 选 **A**。原句的结构是 scale 反映了 immensity，也就是投资的规模反映了能够获得利益的规模，所以答案是 A。B 的谓语发生改变，不是将两者进行比较；C 的主语和宾语都不对，跟原文完全不搭；D 的因果关系莫名其妙。
5. 选 **B**。dramatically 剧烈地，戏剧性地，选 B。
6. 选 **B**。以 spice 做关键词定位至倒数三句话，说香料最受欢迎，能用来做这做那，接着又说即使高价的香料也要大量运输才能平衡高昂的运输成本。既然是运来的，就说明本地不产，所以答案是 B。A 是否容易运输原文没有信息；C 偷换原文概念，原文说能用来生产香水和药，不是用来贸易；D 增值原文完全没说。
7. 选 **A**。EXCEPT 题，排除法，A 的 masts 做关键词定位至最后两句，都说 caravel 的 mast 比 galley 多，所以 A 说反了，选；B 的 hull 做关键词定位至倒数第二句，说 caravel 的 hull 更大更深，能装更多货物，B 和 C 正确，不选；D 的 stable 做关键词定位至倒数第二句，说 increased stability，所以 D 正确，不选。
8. 选 **D**。以 lateen sail 做关键词定位至最后一句，说 lateen sail 能够挪到很多位置来操作这艘船，所以答案是 D，引导船的能力。其他的都没说。
9. 选 **C**。修辞目的题，修辞点所在句子只是单纯说明一个事实，没有观点，往前看，前一句又是一个例子，也不是观点，再次放弃，第一句不是中心句，所以也不行；后面一句也是个例子，还是不对。遇到这种情况要想想是不是整段都是一个例子，在支持前面各段的东西。而且也可以用排除法，B 和 D 都是在简单说例子，就事论事，不选；A 原文没说；所以 C 是答案，而且从第二段就一直在说怎么解决东西方贸易的技术问题，这个也是技术问题的一个。
10. 选 **B**。refine 精炼，精制，所以 improve 正确。
11. 选 **D**。norm 规范，约定，所以答案是 rules。
12. 选 **B**。以 maritime code 做关键词定位至倒数第二句，说航海准则规定了这个那个，最能概括的是 B，而且 maritime conduct 是 B 的同义替换，A 和 C 没说，D 是 B 的一个例子，所以答案是 B。
13. 选 **B**。三个过渡点，名词 a couple of reasons，代词 they 和形容词 highly valued，a couple of reasons 说明这句话之后应该有很多原因，所以不能放得太靠后，形容词 highly valued 与原文的 most sought-after 同义替换，所以答案非 A 即 B，they 说明 A 不对，所以 B 是答案。
14. 选 **BDE**。A 选项是第一段中的一个细节，不选；B 选项对应第二段最后一句，正确；C 选项与第三段相反，不选；D 选项对应原文第三段后半部分，正确；E 选项对应原文第三段，正确；F 选项是第一段中的一个细节，不选。

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## Animal Signals in the Rain Forest

The daytime quality of light in forests varies with the density of the vegetation, the angle of the Sun, and the amount of cloud in the sky. Both animals and plants have different appearances in these various lighting conditions. A color or pattern that is relatively indistinct in one kind of light may be quite **conspicuous** in another.

In the varied and constantly changing light environment of the forest, an animal must be able to send visual signals to members of its own species and at the same time avoid being detected by predators. An animal can hide from predators by choosing the light environment in which its pattern is least visible. This may require moving to different parts of the forest at different times of the day or under different weather conditions, or it may be achieved by changing color according to the changing light conditions. Many species of amphibians (frogs and toads) and reptiles (lizards and snakes) are able to change their color patterns to camouflage themselves. Some also **signal** by changing color. The chameleon lizard has the most striking ability to do this. Some chameleon species can change from a rather dull appearance to a full riot of carnival colors in seconds. By this means, they signal their level of aggression or readiness to mate.

Other species take into account the changing conditions of light by performing their visual displays only when the light is favorable. A male bird of paradise may put himself in the limelight by displaying his spectacular plumage in the best stage setting to attract a female. Certain butterflies move into spots of sunlight that have penetrated to the forest floor and display by opening and closing their beautifully patterned wings in the bright spotlights. They also compete with each other for the best spot of sunlight.

Very little light filters through the canopy of leaves and branches in a rain forest to reach ground level—or close to the ground—and at those levels the yellow-to-green wavelengths predominate. A signal might be most easily seen if it is maximally bright. **In the green-to-yellow lighting conditions of the lowest levels of the forest, yellow and green would be the brightest colors, but when an animal is signaling, these colors would not be very visible if the animal was sitting in an area with a yellowish or greenish background.** The best signal depends not only on its brightness but also on how well it contrasts with the background against which it must be seen. In this part of the rain forest, therefore, red and orange are the best colors for signaling, and they are the colors used in signals by the ground-walking Australian brush turkey. This species, which lives in the rain forests and scrublands of the east coast of Australia, has a brown-to-black plumage with bare, bright-red skin on the head and neck and a neck collar of orange-yellow loosely hanging skin. During courtship and aggressive displays, the turkey enlarges its colored neck collar by **inflating** sacs in the neck region and then flings about a pendulous part of the colored signaling apparatus as it utters calls designed to attract or repel. This impressive display is clearly visible in the light spectrum illuminating the forest floor.

Less colorful birds and animals that inhabit the rain forest tend to rely on other forms of signaling other than the visual, particularly over long distances. ■ The piercing cries of the rhinoceros hornbill characterize the Southeast Asian rain forest, as do the unmistakable calls of the gibbons. ■ In densely wooded environments, sound is the best means of communication over distance because in comparison with light, it travels with little **impediment** from trees and other vegetation. ■ In forests, visual signals can be seen only at short distances, where they are not obstructed by trees. ■ The male riflebird **exploits** both of these modes of signaling simultaneously in his courtship display. The sounds made as each wing is opened carry extremely well over distance and advertise his presence widely. The ritualized visual display communicates in close quarters when a female has approached.

1. The word **"conspicuous"** in the passage is closest in meaning to
  - (A) common
  - (B) noticeable
  - (C) different
  - (D) colorful
2. According to paragraph 2, what is problematic about an animal's sending visual signals to members of its own species?
  - (A) Signs that make an animal visible to its species also make it visible to predators.
  - (B) An animal that changes color to avoid predators can confuse members of its species.
  - (C) Changing light may require an animal to move beyond the visual range of other members.
  - (D) The animal may mistakenly signal aggression when it meant to signal readiness to mate.
3. The word **"signal"** in the passage is closest in meaning to
  - (A) change
  - (B) imitate
  - (C) communicate
  - (D) hide
4. According to paragraph 2, all of the following are reasons amphibians and reptiles change color EXCEPT
  - (A) changing seasons
  - (B) to signal others of their species
  - (C) to match the light
  - (D) to hide from predators
5. According to paragraph 3, butterflies move into spots of sunlight in order to
  - (A) warm their wings in order to open them
  - (B) compete with each other
  - (C) take advantage of favorable light conditions on the forest floor
  - (D) imitate birds of paradise
6. According to paragraph 4, what is true about light that reaches ground level?
  - (A) It reveals only the yellow and green colors animals use to signal each other.
  - (B) It reflects the yellow and green colors to make the floor as bright as sunshine.
  - (C) It camouflages animals whose natural colors are yellow and green.
  - (D) It consists mostly of yellow-to-green wavelengths.
7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) When an animal is signaling in an area with green-to yellow lighting condition. It's signal will not be visible if the background is brightly lit.
  - (B) In the lowest levels of the forest, an animal's signals are not easily seen unless there is a yellowish or greenish background.
  - (C) In the green-to-yellow lighting conditions at the lowest levels of the forest, only signals that are themselves green or yellow will be bright enough to be seen in most areas.
  - (D) Although green and yellow would be the brightest colors near the forest floor, these colors would make poor signals whenever the forest background was also in the green-to-yellow range.
8. The word **"inflating"** in the passage is closest in meaning to
  - (A) coloring
  - (B) enlarging
  - (C) loosening
  - (D) heating
9. Which of the following can be inferred from paragraph 4 about yellow and green colors compared with red and orange colors at the bottom of the forest?
  - (A) Yellow and green are better colors for signaling than red and orange colors.
  - (B) Orange and red are brighter colors than yellow and green.

- (C) Yellow and green are likely to be more common in the background than red and orange.
- (D) Orange and red colors do not contrast as well with the forest floor as yellow and green do.

**10. What can be inferred from paragraph 5 about the less colorful birds and animals that inhabit the forest?**

- (A) These species are less able to see color, and therefore they communicate with one another using nonvisual signals.
- (B) These species generally live in less densely wooded environments than more colorful birds and animals do.
- (C) The cries of these species do not carry as well over distances as the cries of more colorful birds and animals.
- (D) These species depend more on nonvisual signals for communication because they are less visible in their environment.

**11. The word “impediment” in the passage is closest in meaning to**

- (A) obstruction
- (B) effort
- (C) delay
- (D) resistance

**12. The word “exploits” in the passage is closest in meaning to**

- (A) repeats
- (B) makes use of
- (C) increases the intensity of
- (D) recognizes

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

There is also the long, rather terrifying call of the male orangutan, which carries over considerable distances to advertise his presence.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

In the rain forest, an animal must be able to send signals to members of its own species and at the same time avoid being detected by predators.

**Answer choices**

- (A) Animals that have different predators at different times of day change color to avoid being detected.
- (B) To escape notice, an animal may move or change color so that its color pattern is not visible.
- (C) To be noticed, an animal may draw attention to the contrast between its colors and the colors of its environment.
- (D) Yellow and green are the most common colors found in the rain forest.
- (E) Animals must have signals for aggression as well as to indicate readiness to mate.
- (F) An animal may use sound rather than color to attract attention, because sound signals are not hindered by light conditions.

### 参考答案与解析

1. 选 **B**。conspicuous 明显的, noticeable 正确。
2. 选 **A**。以 members of its own species 做关键词定位至第一句, 说动物给自己的同类发信号的时候必须同时避免被天敌看到, 所以答案是 A, 动物的信号也会被捕食者看到。B 的 change colors, C 的 beyond the visual range 和 D 的 signal aggression 原文都没说。
3. 选 **C**。signal 发信号, 是 C 的 communicate。
4. 选 **A**。EXCEPT 题, 排除法, A 在原文无对应点, 所以 A 错, 选; B 的 signal others 做关键词定位至倒数第三句, 正确, 不选; C 的 light 做关键词定位至第一句, 说光线不断变化, 所以 C 正确, 不选; D 的 hide from predators 做关键词定位至倒数第四句, 说 camouflage themselves, 所以 D 正确, 不选。
5. 选 **C**。以 butterfly 做关键词定位至第三句, 说蝴蝶 move into 并且 display blabla, 但这句话没说为什么蝴蝶要 move, 最后一句非常清楚地说蝴蝶会彼此竞争最好的阳光, 也就是 C 说的利用光线条件, 所以答案是 C, B 虽然说了 compete, 但没说 compete 什么, 所以不对, 其他的都是单纯说事件没说原因, 所以不对。
6. 选 **D**。以 light that reaches ground level 做关键词定位至第一句, 说到达地面的光以黄绿波长的为主, D 是原文的忠实改写, 其他都没说, 关键词定准后只读一句话就可以又快又好拿出答案。
7. 选 **D**。原句的结构是本来 yellow 和 green 最亮, 但如果背景也是黄绿色就不亮了, D 正确。A 的 brightly lit 原文没说; B 与原文说反; C 的 only 不对, 而且 most areas 原文也没说。
8. 选 **B**。inflating 充气的, enlarging 是答案。
9. 选 **C**。以 red and orange colors 做关键词定位至第五句, 说在靠近地面的森林里, 红色和橙色是最好的信号色, 与之对照, 黄色和绿色是除了靠近地面的部分之外其他部分最好的信号颜色, 也就是答案 C 说的黄绿色比红橙色更多用于信号。A 与不全面, 如果在靠近地表的地方, 黄绿色就不好; B 和 D 与原文说反。
10. 选 **D**。以 less colorful birds and animals 做关键词定位至第一句, 原句说这些动物会更多依靠非视觉的信号来交流, 答案是 D。B 和 C 没说, A 说他们依靠非视觉, 而原文说更多依靠非视觉, 是不一样的, 而且原文也没说这些动物看不见颜色, 所以 A 错。
11. 选 **A**。impediment 障碍, A 的 obstruction 对。
12. 选 **B**。exploit 开采, 利用, make use of 正确。
13. 选 **B**。两个过渡点, 副词 also 和名词 call, 根据 call 可以确定答案是 A 或者 B, 因为副词 also 说明前面必须得有一个 call, 所以答案不是 A 是 B。
14. 选 **BCF**。A 选项原文没说, 不选; B 选项对应原文第二段前两句, 正确; C 选项对应原文第四段第二句, 正确; D 选项是原文第四段的一个细节, 不选; E 选项与原文第二段的尾句对应, 其实不是一回事儿, 不选; F 选项对应原文第五段第一句, 正确。

### 笔记区

建议将生词和陌生的语法条目记在这里, 并时常翻看。

## 自我评价

用时：     分     秒

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## Symbiotic Relationships

A symbiotic relationship is an interaction between two or more species in which one species lives in or on another species. There are three main types of symbiotic relationships: parasitism, commensalism, and mutualism. The first and the third can be key factors in the structure of a biological community; that is, all the populations of organisms living together and potentially interacting in a particular area.

Parasitism is a kind of predator-prey relationship in which one organism, the parasite, **derives** its food at the expense of its symbiotic associate, the host. Parasites are usually smaller than their hosts. An example of a parasite is a tapeworm that lives inside the intestines of a larger animal and absorbs nutrients from its host. Natural selection favors the parasites that are best able to find and feed on hosts. At the same time, defensive abilities of hosts are also selected for. As an example, plants make chemicals toxic to fungal and bacterial parasites, along with ones toxic to predatory animals (sometimes they are the same chemicals). In vertebrates, the immune system provides a multiple defense against internal parasites.

At times, it is actually possible to watch the effects of natural selection in host-parasite relationships. For example, Australia during the 1940 s was overrun by hundreds of millions of European rabbits. The rabbits destroyed huge expanses of Australia and threatened the sheep and cattle industries. In 1950, myxoma virus, a parasite that affects rabbits, was deliberately introduced into Australia to control the rabbit population. Spread rapidly by mosquitoes, the virus **devastated** the rabbit population. The virus was less deadly to the offspring of surviving rabbits, however, and it caused less and less harm over the years. Apparently, genotypes (the genetic make-up of an organism) in the rabbit population were selected that were better able to resist the parasite. Meanwhile, the deadliest strains of the virus perished with their hosts as natural selection favored strains that could infect hosts but not kill them. Thus, natural selection stabilized this host-parasite relationship.

In contrast to parasitism, in commensalism, one partner benefits without significantly affecting the other. Few cases of absolute commensalism probably exist, because it is unlikely that one of the partners will be **completely unaffected**. Commensal associations sometimes involve one species' obtaining food that is **inadvertently** exposed by another. For instance, several kinds of birds feed on insects flushed out of the grass by grazing cattle. It is difficult to imagine how this could affect the cattle, but the relationship may help or hinder them in some way not yet recognized.

The third type of symbiosis, mutualism, benefits both partners in the relationship. Legume plants and their nitrogen-fixing bacteria, and the interactions between flowering plants and their pollinators, are examples of mutualistic association. In the first case, the plants provide the bacteria with carbohydrates and other organic compounds, and the bacteria have enzymes that act as catalysts that eventually add nitrogen to the soil, enriching it. **In the second case, pollinators (insects, birds) obtain food from the flowering plant, and the plant has its pollen distributed and seeds dispersed much more efficiently than they would be if they were carried by the wind only.** Another example of mutualism would be the bull's horn acacia tree, which grows in Central and South America. The tree provides a place to live for ants of the genus *Pseudomyrmex*. The ants live in large, hollow thorns and eat sugar secreted by the tree. The ants also eat yellow structures at the tip of leaflets: these are protein rich and seem to have no function for the tree except to attract ants. The ants benefit the host tree by attacking virtually anything that touches it. They sting other insects and large herbivores (animals that eat only plants) and even clip surrounding vegetation that grows near the tree. When the ants are removed, the trees usually die, probably because herbivores damage them so much that they are unable to compete with surrounding vegetation for light and growing space.

The complex interplay of species in symbiotic relationships **highlights** an important point about communities: Their structure depends on a web of diverse connections among organisms.

1. **Which of the following statements about commensalism can be inferred from paragraph 1?**
  - (A) It excludes interactions between more than two species.
  - (B) It makes it less likely for species within a community to survive.
  - (C) Its significance to the organization of biological communities is small.
  - (D) Its role in the structure of biological populations is a disruptive one.
2. **The word “derives” in the passage is closest in meaning to**
  - (A) digests
  - (B) obtains
  - (C) controls
  - (D) discovers
3. **According to paragraph 2, which of the following is true of the action of natural selection on hosts and parasites?**
  - (A) Hosts benefit more from natural selection than parasites do.
  - (B) Both aggression in predators and defensive capacities in hosts are favored for species survival.
  - (C) The ability to make toxic chemicals enables a parasite to find and isolate its host.
  - (D) Larger size equips a parasite to prey on smaller host organisms.
4. **The word “devastated” in the passage is closest in meaning to**
  - (A) influenced
  - (B) infected
  - (C) strengthened
  - (D) destroyed
5. **Which of the following can be concluded from the discussion in paragraph 3 about the Australian rabbit population?**
  - (A) Human intervention may alter the host, the parasite, and the relationship between them.
  - (B) The risks of introducing outside organisms into a biological community are not worth the benefits.
  - (C) Humans should not interfere in host-parasite relationships.
  - (D) Organisms that survive a parasitic attack do so in spite of the natural selection process.
6. **According to paragraph 3, all of the following characterize the way natural selection stabilized the Australian rabbit population EXCEPT**
  - (A) The most toxic viruses died with their hosts.
  - (B) The surviving rabbits were increasingly immune to the virus.
  - (C) The decline of the mosquito population caused the spread of the virus to decline.
  - (D) Rabbits with specific genetic make-ups were favored.
7. **The word “inadvertently” in the passage is closest in meaning to**
  - (A) indefensibly
  - (B) substantially
  - (C) unintentionally
  - (D) partially
8. **According to paragraph 5, the relationship between legumes and bacteria benefits the soil by**
  - (A) adding enriching carbohydrates
  - (B) speeding the decay of organic matter
  - (C) destroying enzymes that pollute it
  - (D) contributing nitrogen to it
9. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) The relationship between flowering plants and pollinators provides pollinators with food and flowers with efficient reproduction.
  - (B) In some cases birds obtain food from the seeds that are dispersed in the wind.
  - (C) The wind not only helps the flowers distribute their seeds but enables birds to find more food.
  - (D) Animals and insects are more effective in distributing pollen and seeds than the wind.

**10. According to paragraph 5, which of the following is NOT true of the relationship between the bull's horn acacia tree and the *Pseudomyrmex* ants?**

- (A) Ants defend the host trees against the predatory actions of insects and animals.
- (B) The acacia trees are a valuable source of nutrition for the ants.
- (C) The ants enable the acacia tree to produce its own chemical defenses.
- (D) The ants protect the acacia from having to compete with surrounding vegetation.

**11. The word “highlights” in the passage is closest in meaning to**

- (A) defines
- (B) emphasizes
- (C) reflects
- (D) suggests

**12. What is the main purpose of this passage?**

- (A) To explain the concept of symbiosis by expanded descriptions of its principal types
- (B) To make a comparison between human relationships and symbiotic interactions in the natural world
- (C) To demonstrate the unforeseen benefits of natural processes that at first seem wholly destructive
- (D) To argue that parasitism is a problem that can be solved by scientific intervention

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This massive population began a century earlier as a mere twelve pairs of imported rabbits that reproduced quickly and developed into a major problem.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Symbiotic relationships involve the interaction of two or more organisms acting as partners.

**Answer choices**

- (A) Parasitic relationships involve the interplay of aggression by the parasite and resistance and adaptation by the host.
- (B) Mutualism ordinarily involves an interaction between two members of the same species.
- (C) Mutualism is unique among symbiotic relationships in that it benefits both partners involved in the relationship.
- (D) Parasitic damage to Australian rabbits was never reversed because the rabbits were unable to adapt to the parasites' attacks.
- (E) The rarity of commensal relationships stems from the difficulty of finding relationships that benefit one species without affecting the other.
- (F) The structure of biological communities depends on the types of relationships that exist among the species within.

### 参考答案与解析

1. 选 **C**。以 commensalism 定位至第二句，说有三种类型，第一种和第三种很重要，根据对比，也就是说第二种 commensalism 不重要，所以答案是 C。
2. 选 **B**。derive 起源于，所以正确答案是 obtain。
3. 选 **B**。以 natural selection 定位至第四句，说自然选择会选择那些最容易寻找寄主的寄生者，同时也会选择寄主的防御能力，也就是说不管是寄生者还是寄主都被最大程度保留下来，所以答案是 B。A 的比较，C 的 toxic material 和 isolate，还有 D 的大小均没有相关信息。
4. 选 **D**。devastate 毁灭，所以 destroy 正确。
5. 选 **A**。问题问的是兔子实验得出什么结论，先找到兔子实验，发现兔子实验就是人类干预自然选择的一个例子，但千万不要过于详细看实验的内容，因为问的是结论，所以关注首尾句，第一句说可以预见自然选择对于寄生关系的影响；最后一句说自然选择使寄生关系稳定，所以答案是 A 人类可以改变寄生关系；原文没有将引入生物的优缺点比较，B 错；也没有讲作者对引进生物的态度，C 错；D 也没说。
6. 选 **C**。EXCEPT 题，排除法，A 的 most toxic viruses 做关键词定位至倒数第二句的 deadliest strains of the virus，所以 A 正确，不选；B 的 surviving rabbits 做关键词定位至倒数第四句，正确，不选；C 的 mosquito population 做关键词定位至第五句，跟选项说的完全无关，所以 C 错，选；D 的 genetic make-up 做关键词定位至倒数第三句，所以 D 正确，不选。
7. 选 **C**。inadvertently 不注意地，所以正确答案是 unintentionally。
8. 选 **D**。以 legume, bacteria 和 soil 做关键词定位至第二句，说植物给细菌提供有机物，而细菌中的酶可以作为催化剂向土壤中添加氮，所以答案是 D，其他都没说。
9. 选 **A**。原句结构是 pollinator 和植物互惠互利，所以正确答案是 A。B 混淆概念，pollinator 吃的不是 seed；C 同样混淆概念，没 wind 的事儿；D 只是说植物从中得到的好处，没说 pollinator 的好处，缺失重要信息，错。
10. 选 **C**。EXCEPT 题，排除法，A 的 predatory actions 和 insects and animals 做关键词定位至倒数第二句，所以 A 正确，不选；B 的 nutrition 做关键词定位至倒数第四句的 protein rich，正确，不选；C 的 chemical defenses 在原文没有对应点 C 错，选；D 的 surrounding vegetation 做关键词定位至最后一句，所以 D 正确，不选。
11. 选 **B**。highlight 强调，所以 B 的 emphasize 正确。
12. 选 **A**。问的是整个文章的目的是什么，所以应该关注各段的中心句。文章第一段就说共生关系有多种类型，接着分几段分别说了几个类别的共生关系，所以答案是 A，分类描述了概念。B 错，不是比较自然和人；C 和 D 都不是全文所说。
13. 选 **A**。三个过渡点，代词 this，名词 massive population 和名词 problem。注意单纯找 population 不行，因为待插入句特别强调种群数量很多，对应 A 选项之前的 hundreds of millions of European rabbit，而且代词 this 说明之前应该有被指代的名词，所以答案是 A。
14. 选 **ACE**。A 选项对应原文第二段，正确；B 选项的 same species 原文没说，不选；C 选项对应第五段的第一句，正确；D 选项与原文第三段第六句说反，而且即使说对也是个细节，不选；E 选项对应原文第四段第二句，正确；F 选项的 among species 与原文最后一段不同，最后一段说的是 among organism，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时： 分 秒

难度：易 / 中 / 难

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## The Mystery of Yawning

**According to conventional theory, yawning takes place when people are bored or sleepy and serves the function of increasing alertness by reversing, through deeper breathing, the drop in blood oxygen levels that are caused by the shallow breathing that accompanies lack of sleep or boredom.**

Unfortunately, the few scientific investigations of yawning have failed to find any connection between how often someone yawns and how much sleep they have had or how tired they are. About the closest any research has come to supporting the tiredness theory is to confirm that adults yawn more often on weekdays than at weekends, and that school children yawn more frequently in their first year at primary school than they do in kindergarten.

Another **flaw** of the tiredness theory is that yawning does not raise alertness or physiological activity, as the theory would predict. When researchers measured the heart rate, muscle tension and skin conductance of people before, during and after yawning, they did detect some changes in skin conductance following yawning, indicating a slight increase in physiological activity. However, similar changes occurred when the subjects were asked simply to open their mouths or to breathe deeply. Yawning did nothing special to their state of physiological activity. Experiments have also cast serious doubt on the belief that yawning is triggered by a drop in blood oxygen or a rise in blood carbon dioxide. ■ Volunteers were told to think about yawning while they breathed either normal air, pure oxygen, or an air mixture with an above-normal level of carbon dioxide. ■ If the theory was correct, breathing air with extra carbon dioxide should have **triggered** yawning, while breathing pure oxygen should have suppressed yawning. ■ In fact, neither condition made any difference to the frequency of yawning, which remained constant at about 24 yawns per hour. ■ Another experiment demonstrated that physical exercise, which was sufficiently vigorous to double the rate of breathing, had no effect on the frequency of yawning. Again the implication is that yawning has little or nothing to do with oxygen.

A completely different theory holds that yawning assists in the physical development of the lungs early in life, but has no remaining biological function in adults. It has been suggested that yawning and hiccupping might serve to clear out the fetuses airways. The lungs of a fetus secrete a liquid that mixes with its mother's amniotic fluid. Babies with congenital blockages that prevent this fluid from escaping from their lungs are sometimes born with deformed lungs. It might be that yawning helps to clear out the lungs by **periodically** lowering the pressure in them. According to this theory, yawning in adults is just a developmental fossil with no biological function. But, while accepting that not everything in life can be explained by Darwinian evolution, there are sound reasons for being skeptical of theories like this one, which avoid the issue of what yawning does for adults. Yawning is distracting, consumes energy and takes time. It is almost certainly doing something significant in adults as well as in fetuses. What could it be?

The **empirical** evidence, such as it is, suggests an altogether different function for yawning—namely, that yawning prepares us for a change in activity level. Support for this theory came from a study of yawning behavior in everyday life. Volunteers wore wrist-mounted devices that automatically recorded their physical activity for up to two weeks: the volunteers also recorded their yawns by pressing a button on the device each time they yawned. The data showed that yawning tended to occur about 15 minutes before a period of increased behavioral activity. Yawning bore no relationship to sleep patterns, however. This accords with anecdotal evidence that people often yawn in situations where they are neither tired nor bored, but are preparing for impending mental and physical activity. Such yawning is often referred to as “incongruous” because it seems out of place, at least on the tiredness view: **soldiers yawning before combat, musicians yawning before performing, and athletes yawning before competing.** Their yawning seems to have nothing to do with sleepiness or boredom—quite the reverse—but it does precede a change in activity level.

1. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) It is the conventional theory that when people are bored or sleepy, they often experience a drop in blood oxygen levels due to their shallow breathing.
  - (B) The conventional theory is that people yawn when bored or sleepy because yawning raises blood oxygen levels, which in turn raises alertness.
  - (C) According to conventional theory, yawning is more likely to occur when people are bored or sleepy than when they are alert and breathing deeply.
  - (D) Yawning, according to the conventional theory, is caused by boredom or lack of sleep and can be avoided through deeper breathing.
2. In paragraph 1, what point does the author make about the evidence for the tiredness theory of yawning?
  - (A) There is no scientific evidence linking yawning with tiredness.
  - (B) The evidence is wide-ranging because it covers multiple age-groups.
  - (C) The evidence is reliable because it was collected over a long period of time.
  - (D) The evidence is questionable because the yawning patterns of children and adults should be different.
3. The word “flaw” in the passage is closest in meaning to
  - (A) fault
  - (B) aspect
  - (C) confusion
  - (D) mystery
4. In the paragraph 2, why does the author note that there were physiological changes when subjects opened their mouths or breathed deeply?
  - (A) To present an argument in support of the tiredness theory
  - (B) To cast doubt on the reliability of the tests that measured heart rate, muscle tension and skin conductance
  - (C) To argue against the hypothesis that yawning provides a special way to improve alertness or raise physiological activity
  - (D) To support the idea that opening the mouth or breathing deeply can affect blood oxygen levels
5. The word “triggered” in the passage is closest in meaning to
  - (A) removed
  - (B) followed
  - (C) increased
  - (D) caused
6. Paragraph 2 answers all of the following questions about yawning EXCEPT
  - (A) Does yawning increase alertness or physiological activity?
  - (B) Does thinking about yawning increase yawning over not thinking about yawning?
  - (C) Does the amount of carbon dioxide and oxygen in the air affect the rate at which people yawn?
  - (D) Does the rate of breathing affect the rate at which people yawn?
7. The word “periodically” in the passage is closest in the meaning to
  - (A) continuously
  - (B) quickly
  - (C) regularly
  - (D) carefully
8. According to the developmental theory of yawning presented in paragraph 3, what is the role of yawning?
  - (A) It caused hiccups, which aid in the development of the lungs.
  - (B) It controls the amount of pressure the lungs place on other developing organs.
  - (C) It prevents amniotic fluid from entering the lungs.
  - (D) It removes a potentially harmful fluid from the lungs.

- 9. Paragraph 3 supports which of the following statements about the development theory of yawning?**
- (A) The theory is attractive because it explains yawning from the perspective of Darwinian evolution.
  - (B) The theory is unsatisfactory because it cannot explain the lung deformities of infants.
  - (C) The theory is questionable because it does not explain why a useless and inconvenient behavior would continue into adulthood.
  - (D) The theory is incomplete because it does not explain all the evolutionary stages in the development of yawning.
- 10. The word “empirical” in the passage is closest in meaning to**
- (A) reliable
  - (B) based on common sense
  - (C) relevant
  - (D) based on observation
- 11. The study of yawning behavior discussed in paragraph 4 supports which of the following conclusions?**
- (A) Yawning is associated with an expectation of increased physical activity.
  - (B) Yawning occurs more frequently when people are asked to record their yawning.
  - (C) People tend to yawn about fifteen minutes before they become tired or bored.
  - (D) Mental or physical stress tends to make people yawn.
- 12. Why does the author mention “soldiers yawning before combat, musicians yawning before performing, and athletes yawning before competing”?**
- (A) To argue that just the expectation of physical activity can make some people feel tired
  - (B) To explain how the view that people yawn because they are tired accounts for yawning before stressful situations
  - (C) To support the view that yawning helps prepare a person for mental or physical exertion
  - (D) To provide anecdotal evidence that conflicts with the experience of the volunteers in the study
- 13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**
- This, however, was not the case.
- Where would the sentence best fit?**
- 14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The tiredness theory of yawning does not seem to explain why yawning occurs.

**Answer choices**

- (A) Although earlier scientific studies strongly supported the tiredness theory, new evidence has cast doubt on these findings.
- (B) Evidence has shown that yawning is almost completely unrelated to amount of oxygen in the blood and is unrelated to sleep behavior.
- (C) Some have proposed that yawning plays a role in the development of the lungs before birth but that it serves no purpose in adults.
- (D) Fluids in the lungs of the fetus prevent yawning from occurring, which disproves the developmental theory of yawning.
- (E) New studies, along with anecdotal evidence, have shown that the frequency of yawning increases during extended periods of inactivity.
- (F) There is some evidence that suggests that yawning prepares the body and mind for a change in activity level.

### 参考答案与解析

1. 选 **B**。原文说 yawn 是因为 bored or sleepy, 并且能够起到提神的作用, 所以 B 正确。A 缺失了原文的 reversing 部分; C 的比较是原文没有的; D 的 can be avoided 原文没说。
2. 选 **A**。接上题, 第一句说传统理论认为打呵欠与累和无聊有关, 这正是本题问的 tiredness theory, 所以往下看, 下一句说没有证据证明这个理论, 所以答案是 A, 原文明确说没有证据, BCD 都说有 evidence, 错。
3. 选 **A**。flaw 瑕疵, 所以 fault 正确。
4. 选 **C**。修辞目的题, 首先找到修辞点所在的第三句, 本句只是在重复这个例子, 没有观点性的东西, 往前看。前句说测到了一些生理上的变化, 还是在说例子, 所以看中心句, 也就是第一句, 说打呵欠根本不会提高清醒程度, 所以答案是 C。A 和 D 反了, B 说质疑实验的可靠性, 作者不是质疑实验, 而是质疑结论, 并用实验支持这个质疑。
5. 选 **D**。trigger 引起, 所以 cause 正确。
6. 选 **B**。EXCEPT 题, 排除法, A 的 alertness or physiological activity 做关键词定位至第一句, 正确, 不选; B 的 thinking about yawning 做关键词定位至倒数第三句, 没有说是否 increase, 所以 B 没说, 选; C 的 rate of yawning 做关键词定位至倒数第二句, 正确, 不选; D 的 rate of breathing 做关键词定位至最后一句, D 正确, 不选。
7. 选 **C**。periodically 规律地, C 的 regularly 正确。
8. 选 **D**。以 developmental theory 做关键词定位至第一句, 说打呵欠在生命的早期是有用的, 但对成人没用, 但这句只是单纯在说理论, 往下看。下一句说打嗝和打呵欠能帮助胎儿清理呼吸道, 所以答案是 D。A 没说; B 的 other developing organ 没说; C 的 prevent 没说。
9. 选 **C**。此题排除法比较容易解, 理由是问到整段可以看首句, 但首句我们刚才已经看过了, 没用。B 的 lung deformity 做关键词定位至第四句, 但完全没说是否解释; C 的 adulthood 做关键词定位至第六句, 说承认打呵欠没用, 接着又说这个理论是值得怀疑的, 所以答案是 C, 没解释为什么没用的呵欠一直保留到成人时期, 同时说明 A 说这个理论 attractive 是错的; D 的 evolutionary stage 原文完全没说, 不选。
10. 选 **D**。empirical 凭经验的, 所以答案是 D。
11. 选 **A**。问整段的结论, 看开头句, 说事实证明, 打呵欠的作用是表面活动水平的变化, 所以答案是 A, increased activity; BCD 都完全没说, 而且也不是整段的结论。
12. 选 **C**。修辞目的题, 先看修辞点所在句子, 发现只是单纯陈述一个例子, 继续往前看, 上句说人们打呵欠既不是因为困也不是因为累, 而是为了给精神上 and 身体上的活动做准备, 所以答案是 C。A 的 expectation, B 的 stressful situation 和 D 的 conflict 原文都没说。
13. 选 **C**。两个过渡点, 转折连词 however 和代词 this, B 点之后的 if 作出假设, 而 C 点之后的 in fact 给出了转折, 所以答案是 C。代入, 之前说如果 blabla, 紧接着说不是这么回事, 然后 in fact 给出解释。
14. 选 **BCF**。A 选项中的 earlier scientific studies 原文没说, 不选; B 选项对应原文第二段的第一句和最后一句, 正确; C 选项对应原文第三段第一句, 正确; D 选项对应原文第三段, 但原文没说, 不选; E 选项原文没说, 不选; F 选项对应原文最后一段第一句, 正确。

### 笔记区

建议将生词和陌生的语法条目记在这里, 并时常翻看。

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**Industrialization in the Netherlands and Scandinavia**

While some European countries, such as England and Germany, began to industrialize in the eighteenth century, the Netherlands and the Scandinavian countries of Denmark, Norway, and Sweden developed later. ■ All four of these countries lagged considerably behind in the early nineteenth century. ■ However, they industrialized rapidly in the second half of the century, especially in the last two or three decades. ■ In view of their later start and their lack of coal—undoubtedly the main reason they were not among the early industrializers—it is important to understand the sources of their success. ■

All had small populations. At the beginning of the nineteenth century, Denmark and Norway had fewer than 1 million people, while Sweden and the Netherlands had fewer than 2.5 million inhabitants. All exhibited moderate growth rates in the course of the century (Denmark the highest and Sweden the lowest), but all more than doubled in population by 1900. Density varied greatly. The Netherlands had one of the highest population densities in Europe, whereas Norway and Sweden had the lowest Denmark was in between but closer to the Netherlands.

Considering human capital as a characteristic of the population, however, all four countries were advantaged by the large percentages of their populations who could read and write. In both 1850 and 1914, the Scandinavian countries had the highest literacy rates in Europe, or in the world, and the Netherlands was well above the European average. This fact was of enormous value in helping the national economies find their niches in the evolving currents of the international economy.

Location was an important factor for all four countries. All had immediate access to the sea, and this had important implications for a significant international resource, fish, as well as for cheap transport, merchant marines, and the shipbuilding industry. Each took advantage of these opportunities in its own way. The people of the Netherlands, with a long tradition of fisheries and mercantile shipping, had difficulty in developing good harbors suitable for steamships: eventually they did so at Rotterdam and Amsterdam, with exceptional results for transit trade with Germany and central Europe and for the processing of overseas foodstuffs and raw materials (sugar, tobacco, chocolate, grain, and eventually oil). Denmark also had an admirable commercial history, particularly with respect to traffic through the Sound (the strait separating Denmark and Sweden). In 1857, in return for a payment of 63 million kronor from other commercial nations, Denmark abolished the Sound toll dues the fees it had collected since 1497 for the use of the Sound. This, along with other policy shifts toward free trade, resulted in a significant increase in traffic through the Sound and in the port of Copenhagen.

The political institutions of the four countries posed no significant barriers to industrialization or economic growth. The nineteenth century passed relatively peacefully for these countries, with progressive democratization taking place in all of them. They were reasonably well governed, without notable corruption or grandiose state projects, although in all of them the government gave some aid to railways, and in Sweden the state built the main lines. As small countries dependent on foreign markets, they followed a liberal trade policy in the main, though a protectionist movement developed in Sweden. In Denmark and Sweden agricultural reforms took place gradually from the late eighteenth century through the first half of the nineteenth, resulting in a new class of peasant landowners with a definite market orientation.

**The key factor in the success of these countries (along with high literacy, which contributed to it) was their ability to adapt to the international division of labor determined by the early industrializers and to stake out areas of specialization in international markets for which they were especially well suited.**

This meant a great dependence on international commerce, which had notorious fluctuations; but it also meant high returns to those factors of production that were fortunate enough to be well placed in times of prosperity. In Sweden exports accounted for 18 percent of the national income in 1870, and in 1913, 22 percent of a much larger national income. In the early twentieth century, Denmark exported 63 percent of its agricultural production: butter, pork products, and eggs. It exported 80 percent of its butter, almost all to Great Britain, where it accounted for 40 percent of British butter imports.

1. **Paragraph 1 supports which of the following ideas about England and Germany?**
  - (A) They were completely industrialized by the start of the nineteenth century.
  - (B) They possessed plentiful supplies of coal.
  - (C) They were overtaken economically by the Netherlands and Scandinavia during the early nineteenth century.
  - (D) They succeeded for the same reasons that the Netherlands and Scandinavia did.
2. **Paragraph 2 suggests which of the following about the importance of population density in the industrialization of the Netherlands and Scandinavia?**
  - (A) It was a more important factor than population size.
  - (B) It was more influential than the rate of population growth.
  - (C) It was more important in the early stages than it was later.
  - (D) It was not a significant factor.
3. **According to paragraphs 2 and 3, which of the following contributed significantly to the successful economic development of the Netherlands and of Scandinavia?**
  - (A) The relatively small size of their populations
  - (B) The rapid rate at which their populations were growing
  - (C) The large amount of capital they had available for investment
  - (D) The high proportion of their citizens who were educated
4. **According to paragraph 4, because of their location, the Netherlands and the Scandinavian countries had all of the following advantages when they began to industrialize EXCEPT**
  - (A) low-cost transportation of goods
  - (B) access to fish
  - (C) shipbuilding industries
  - (D) military control of the sea
5. **The word “exceptional” in the passage is closest in meaning to**
  - (A) extraordinary
  - (B) surprising
  - (C) immediate
  - (D) predictable
6. **The word “abolished” in the passage is closest in meaning to**
  - (A) ended
  - (B) raised
  - (C) returned
  - (D) lowered
7. **According to paragraph 5, each of the following contributed positively to the industrialization of the Netherlands and Scandinavia EXCEPT**
  - (A) generally liberal trade policies
  - (B) huge projects undertaken by the state
  - (C) relatively uncorrupt governments
  - (D) relatively little social or political disruption
8. **The word “progressive” in the passage is closest in meaning to**
  - (A) rapid
  - (B) partial
  - (C) increasing
  - (D) individual
9. **The author includes the information that “a protectionist movement developed in Sweden” in order to**
  - (A) support the claim that the political institutions of the four countries posed no significant barriers to industrialization or economic growth
  - (B) identify an exception to the general trend favoring liberal trade policy
  - (C) explain why Sweden industrialized less quickly than the other Scandinavian countries and Netherlands

- (D) provide evidence that agricultural reforms take place more quickly in countries that have a liberal trade policy than in those that do not

**10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) The early industrializers controlled most of the international economy, leaving these countries to stake out new areas of specialization along the margins.  
 (B) Aided by their high literacy rates these countries were able to claim key areas of specialization within established international markets.  
 (C) High literacy rates enabled these countries to take over international markets and adapt the international division of labor to suit their strengths.  
 (D) The international division of labor established by the early industrializers was suited to these countries, a key factor in their success.

**11. According to paragraph 6, a major problem with depending heavily on international markets was that they**

- (A) lacked stability  
 (B) were not well suited to agricultural products  
 (C) were largely controlled by the early industrializers  
 (D) led to slower growth of local industries

**12. According to paragraph 6, what advantage could a country gain from being heavily involved in international commerce?**

- (A) A steadily rising national income  
 (B) Greater control over market fluctuations  
 (C) High returns when things went well  
 (D) A reduced need for imports

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

During this period, Sweden had the highest rate of growth of output per capita of any country in Europe, and Denmark was second.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Although the Netherlands and Scandinavia began to industrialize relatively late, they did so very successfully.

**Answer choices**

- (A) Although these countries all started with small, uneducated populations, industrialization led to significant population growth and higher literacy rates.  
 (B) Thanks to their ready access to the sea, these countries enjoyed advantages in mercantile shipping, fishing, and shipbuilding.  
 (C) Because they all started with good harbors for steamships, these countries started with an important advantage in the competition for transit trade.  
 (D) These countries were helped by the fact that their governments were relatively stable and honest and generally supported liberal trade policies.  
 (E) These countries were successful primarily because their high literacy rates helped them fill specialized market niches.  
 (F) Because they were never fully dependent on international commerce, these countries were able to survive notorious fluctuations in international markets.

### 参考答案与解析

1. 选 **B**。注意这道题没有明显关键词，England 和 Germany 是不能用的，因为跟主题相关，所以用排除法。A 的 start of the 19th century 做关键词定位至第二句，说相对落后，A 和 C 都反了；B 的 coal 做关键词定位至最后一句，原文说没有 coal 因此北欧国家没有很早实现工业化，也就是很早实现工业化的英国和德国有 coal，所以 B 正确；D 与原文第一句相反，不选。
2. 选 **D**。population density 做关键词定位至第二段最后两句，说人口密度变化大，丹麦最大瑞典最小，但他们都实现了工业化而且工业化的原因是相同的，所以 density 不重要，D 正确。原文没有任何比较，所以其他答案都不对。
3. 选 **D**。以 economic development 做关键词定位至第三段最后一句，说这个事实帮助经济发展，因为有代词，所以看前一句，前句说北欧国家有全欧洲甚至是全世界最高的识字率，所以应该是受教育程度帮助经济发展，所以答案是 D。A 的 size，B 的 rate 和 C 的 investment 原文都没说。
4. 选 **D**。排除法。A 的 transportation，B 的 fish 和 C 的 shipbuilding 做关键词都可以定位至第二句的，所以都正确，都不选；只有 D 在原文没有对应点，错，选。
5. 选 **A**。exceptional 出众的，extraordinary 对。
6. 选 **A**。abolish 废除，所以 end 是正确答案。
7. 选 **B**。EXCEPT 题，排除法，A 的 liberal trade policies 做关键词定位至倒数第二句，所以 A 正确，不选；B 的 huge projects 做关键词定位至第三句，原文说没有 state projects，所以 B 说反，选；同一句话说明 C 正确，不选；D 的 little disruption 做关键词定位至第二句的 relatively peacefully，所以 D 正确，不选。
8. 选 **C**。progressive 进步的，increasing 正确。
9. 选 **B**。修辞目的题，先看修辞点所在句子，说作为小国家，北欧国家通常执行比较开放的贸易政策，但瑞典是奉行保护主义的，也就是说作者写的是个例外，所以答案是 B，注意 A 是错的，因为瑞典的保护主义其实是设置了障碍的，所以 A 反了，C 和 D 都没说。
10. 选 **B**。这句比较麻烦，主干说成功的因素是适应并且开拓了专业领域。所以 B 正确。A 的 stake out new areas 原文没说，原文说的是 areas of specialization；C 的 take over 原文没说；D 说反了，应该是这些国家适应 labor market，不是 labor market 适应这些国家。
11. 选 **A**。以 international market 做关键词定位至第二句，说 international commerce 存在巨大波动，所以正确答案是 A 缺乏稳定性。剩下的三个答案都没说。
12. 选 **C**。还是 international market 做关键词定位至第二句，上题问 international commerce 有什么问题，这题问什么好处，第二句的后半句突然一个 but，说明前面说不好后面要说好了，说回报率很高，所以答案是 C，其他都没说。
13. 选 **C**。一个过渡点，this period 说明正确插入点之前必须有一段时间，而有时间的只有 B 和 C，但 B 之后的 however 恰当地表明了插入点前后两句话之间的转折关系，所以不插入任何句子，C 正确。
14. 选 **BDE**。A 选项与原文第三段第一句说反，不选；B 选项对应原文第四段第一句，正确；C 选项是第四段的一个细节，不选；D 选项原文第五段第一句，正确；E 选项对应原文第三段的头尾句，正确；F 选项与原文第六段第二句说反，不选。

### 笔记区

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**Lightning**

Lightning is a brilliant flash of light produced by an electrical discharge from a storm cloud. The electrical discharge takes place when the attractive tension between a region of negatively charged particles and a region of positively charged particles becomes so great that the charged particles suddenly rush together. The coming together of the oppositely charged particles neutralizes the electrical tension and releases a tremendous amount of energy, which we see as lightning. The separation of positively and negatively charged particles takes place during the development of the storm cloud.

The separation of charged particles that forms in a storm cloud has a sandwich-like structure. Concentrations of positively charged particles develop at the top and bottom of the cloud, but the middle region becomes negatively charged. Recent measurements made in the field together with laboratory simulations offer a promising explanation of how this structure of charged particles forms. What happens is that small (millimeter-to centimeter-size) pellets of ice form in the cold upper regions of the cloud. When these ice pellets fall, some of them strike much smaller ice crystals in the center of the cloud. The temperature at the center of the cloud is about  $-15^{\circ}\text{C}$  or lower. At such temperatures, the collision between the ice pellets and the ice crystals causes electrical charges to shift so that the ice pellets acquire a negative charge and the ice crystals become positively charged. Then updraft wind currents carry the light, positively charged ice crystals up to the top of the cloud. The heavier negatively charged ice pellets are left to concentrate in the center. This process explains why the top of the cloud becomes positively charged, while the center becomes negatively charged. The negatively charged region is large: several hundred meters thick and several kilometers in diameter. Below this large, cold, negatively charged region, the cloud is warmer than  $-15^{\circ}\text{C}$ , and at these temperatures, collisions between ice crystals and falling ice pellets produce positively charged ice pellets that then populate a small region at the base of the cloud.

Most lightning takes place within a cloud when the charge separation within the cloud collapses. However, as the storm cloud develops, the ground beneath the cloud becomes positively charged and lightning can take place in the form of an electrical discharge between the negative charge of the cloud and the positively charged ground. Lightning that strikes the ground is the most likely to be destructive, so even though it represents only 20 percent of all lightning, it has received a lot of scientific attention.

Using high-speed photography, scientists have determined that there are two steps to the occurrence of lightning from a cloud to the ground. First, a channel, or path, is formed that connects the cloud and the ground. Then a strong current of electrons follows that path from the cloud to the ground, and it is that current that illuminates the channel as the lightning we see.

The formation of the channel is initiated when electrons surge from the cloud base toward the ground. When a stream of these negatively charged electrons comes within 100 meters of the ground it is met by a stream of positively charged particles that comes up from the ground. When the negatively and positively charged streams meet, a complete channel connecting the cloud and the ground is formed. The channel is only a few centimeters in diameter, but that is wide enough for electrons to follow the channel to the ground in the visible form of a flash of lightning. The stream of positive particles that meets the surge of electrons from the cloud often arises from a tall pointed structure such as a metal flagpole or a tower. That is why the subsequent lightning that follows the completed channel often strikes a tall structure. ■

Once a channel has been formed, it is usually used by several lightning discharges, each of them consisting of a stream of electrons from the cloud meeting a stream of positive particles along the established path. ■ Sometimes, however, a stream of electrons following an established channel is met by a positive stream making a new path up from the ground. ■ The result is a forked lightning that strikes the ground in two places. ■

1. **According to paragraph 1, all of the following take place in the development of a flash of lightening EXCEPT**
  - (A) great tension between two oppositely charged regions
  - (B) an increase in negatively charged particles over positively charged particles
  - (C) oppositely charged particles coming together
  - (D) the release of electrical energy in the form of visible light
2. **The word “tremendous” in the passage is closest in meaning to**
  - (A) distinct
  - (B) growing
  - (C) huge
  - (D) immediate
3. **According to paragraph2, what causes ice crystal to become positively charged?**
  - (A) Collisions with ice pellets
  - (B) Collisions with negatively charged ice crystals at the base of the cloud
  - (C) Becoming concentrated in the central region of the cloud
  - (D) Forming at a temperature greater than  $-15^{\circ}\text{C}$
4. **The word “acquire” in the passage is closest in meaning to**
  - (A) reject
  - (B) obtain
  - (C) need
  - (D) produce
5. **According to paragraph2, why are positively charged ice pellets produced in the lower part of the cloud?**
  - (A) Collisions between ice crystals and ice pellets increase in number in the lower part of the cloud.
  - (B) The lower part of the cloud is smaller than the region above it.
  - (C) More ice pellets than ice crystals reach the lower part of the cloud.
  - (D) Temperature in the lower part of the cloud are warmer than  $-15^{\circ}\text{C}$ .
6. **According to paragraph2, the middle region of a cloud becomes negatively charged due to all of the following EXCEPT**
  - (A) a shift of electrical charged between ice pellets and ice crystals
  - (B) negatively charged ice pellets that remain in the middle
  - (C) a temperature of  $-15^{\circ}\text{C}$  or less
  - (D) the development of a positive charge at the base of the cloud
7. **It can be inferred from paragraph 2 that part of the reason that the top of a storm cloud becomes positively charged is that**
  - (A) the top of the cloud is warmer than the middle of the cloud
  - (B) the middle of the cloud is already occupied by positively charged particles
  - (C) the negatively charged ice pellets are too heavy to be carried by the updrafts that move ice crystals
  - (D) collisions between ice pellets in the top of the cloud produce mainly positively charged particles
8. **The author remarks that “Lightning that strikes the ground is the most likely to be destructive” in order to explain why**
  - (A) this form of lightning has been investigated so much
  - (B) this form of lightning is not as common as lightning within a cloud
  - (C) scientific understanding of this form of lightning is important
  - (D) the buildup of positive charge on the ground beneath a storm cloud can have serious consequences
9. **The word “illuminates” in the passage is closet in meaning to**
  - (A) opens
  - (B) completes
  - (C) lights
  - (D) electrifies
10. **According to paragraph5, which of the following is true of the stream of charged particles from the ground?**

- (A) It prevents streams of electrons from the cloud from striking the ground.
- (B) It completes a channel that connects the storm cloud with the ground.
- (C) It produces a stream of electrons from the cloud.
- (D) It widens the path made by the initial stream of electrons from the cloud.

**11. Which of the following claims about lightning strikes can be inferred from paragraph 5?**

- (A) During a lightning strike the diameter of the channel the electrons follow is considerably enlarged beyond a few centimeters.
- (B) A building is unlikely to be hit by lightning unless it is at least 100 meters tall.
- (C) A building is hit by a lightning strike because the building itself has first determined the path the lightning then takes to it.
- (D) The light of a lightning strike first appears at the point where the streams of negative and positive particles meet.

**12. The word “initiated” is closest in meaning to**

- (A) started
- (B) intensified
- (C) finished
- (D) expected

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The descending stream of electrons divides at the point where the new positive-stream channel intersects the established path.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Lightning takes place when a separation of a positive and negative electrical particles that develops in a storm could suddenly collapses.

**Answer choices**

- (A) A storm cloud first develops a positively charged layer at the top, then a negatively charged middle layer, and finally, a positively charged layer at the bottom.
- (B) A separation of oppositely charged particles in clouds develops from collisions of falling ice pellets with ice crystals, from updrafts, and from temperature variations.
- (C) Lightning from cloud to ground follows a channel that forms when a stream of electrons moving down meets a stream of positive particles coming up from the ground.
- (D) Field studies, laboratory simulations, and high-speed photography have all been used to investigate the way charge separations develop in clouds.
- (E) Lightning from a cloud to the ground is more likely to be destructive than is lightning that takes place within a cloud.
- (F) Once a channel has been formed, it is usually used by several successive electrical discharges that illuminate the channel as flashes of lightning.

### 参考答案与解析

1. 选 **B**。EXCEPT 题，排除法，A 的 tension 和做关键词定位至第二句，正确，不选；B 的 negatively 和 positively charged particles 同样定位至第二句，但原文没有比较，所以 B 没说，选；C 的 come together 和 D 的 release 做关键词定位都至倒数第二句，都正确，都不选。
2. 选 **C**。tremendous 巨大的，所以答案是 huge。
3. 选 **A**。以 ice crystal 和 positively charged 做关键词定位至第七句，说在这样的温度下，ice pellet 和 ice crystal 的碰撞转移了电荷，使得 pellet 带负电，crystal 带正电，所以答案应该是 A 碰撞；B 虽然也说到碰撞，但不是和负电碰撞；D 的温度不是带正电的决定条件。
4. 选 **B**。acquire 获得，所以答案 obtain 正确。
5. 选 **D**。以 positively charged ice pellets 做关键词定位至最后一句，说在这个很大的，带负电的区域之下，碰撞产生了 positively charged pellets，所以答案是 D。A 的 increase in number，B 的 smaller 和 C 的比较原文都没说。
6. 选 **D**。EXCEPT 题，排除法，A 的 ice pellets and ice crystals 做关键词定位至第七句，正确，不选；B 的 in the middle 做关键词定位至倒数第四句，正确，不选；C 的数字做关键词定位至第六句，正确，不选；D 的 the base of the cloud 做关键词定位都至最后一句，但倒数第三句已经说过 this process explains，也就是说原因到倒数第三句就给完了，D 不是原因，错，选。
7. 选 **C**。以 top of the storm cloud 做关键词定位至倒数第五句，说向上的气流将轻的、带正电的粒子带到云层上部，这自然是上部云层带正电的原因，反过来说也就是带负电的粒子很重，所以没有上来，所以答案是 C。原文只是说了中部和下部的温度，上部温度没有信息，所以 A 错；由倒数第四句可知中部是负电，B 说反了；D 也没说。
8. 选 **A**。修辞目的题，修辞点所在句子说这种闪电具有破坏性，所以尽管这类闪电只占全部的 20%，它仍然受到了很多关注，也就是解释受关注是因为具有破坏性，所以答案是 A。
9. 选 **C**。illuminate 发光，所以 C 的 light 正确。
10. 选 **B**。以 stream of charged particles from the ground 做关键词定位至第二句，说来自地面的带负电的电子流会在地面以上 100 米左右碰上来自云层的带正电的电子流，然后又说当二者碰在一起的时候就形成了通路，所以 B 形成通路是正确的。A 的 prevent，C 的 produce 和 D 的 widen 原文都没说。
11. 选 **C**。因此题关键词比较难找，所以用排除法。A 的 diameter of the channel 和 centimeter 做关键词定位至第四句，但原文没有信息能推出 widen，所以 A 错；B 的数字做关键词定位至第二句，说 100 米内正负电荷就会碰到，所以 B 说反；C 的 path 做关键词定位至最后一句的 channel，说正电荷通常升起自地面上的一个高点，比如旗杆，然后闪电由通路到达地面，也就是说旗杆等高的建筑物是这个 channel 的一部分，所以 C 说 building 决定了 path 是对的；D 的 first appear 原文没有相关信息。
12. 选 **A**。initiate 开始，所以正确答案是 A。
13. 选 **C**。两个过渡点，名词 established path 和动词 divide，根据 established path 可以确定答案是 ABC，注意 established channel 和 established path 是同义词，所以不要忘了 C，根据 divide 与最后一句 forked 的同义替换确定 C 或者 D，所以 C 是答案。
14. 选 **BCF**。A 选项明显不对，因为正负电荷是同时形成的，没有先后，不选；B 选项对应原文第二段，正确；C 选项对应原文第五段的第一句和第三句，正确；D 选项是原文第二段和第四段的细节，不选；E 选项对应第三段最后一句，但原文没有比较，不选；F 选项对应原文最后一段第一句，正确。

### 笔记区

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**Discovering the Ice Ages**

In the middle of the nineteenth century, Louis Agassiz, one of the first scientists to study glaciers, immigrated to the United States from Switzerland and became a professor at Harvard University, where he continued his studies in geology and other sciences. For his research, Agassiz visited many places in the northern parts of Europe and North America, from the mountains of Scandinavia and New England to the rolling hills of the American Midwest. ■ In all these diverse regions, Agassiz saw signs of glacial erosion and sedimentation. ■ In flat plains country, he saw moraines (accumulations of earth and loose rock that form at the edges of glaciers) that reminded him of the terminal moraines found at the end of valley glaciers in the Alps. ■ The heterogeneous material of the drift (sand, clay, and rocks deposited there) convinced him of its glacial origin. ■

The areas covered by this material were so vast that the ice that deposited it must have been a continental glacier larger than Greenland or Antarctica. Eventually, Agassiz and others convinced geologists and the general public that a great continental glaciation had extended the polar ice caps far into regions that now enjoy temperate climates. For the first time, people began to talk about ice ages. It was also apparent that the glaciation occurred in the relatively recent past because the drift was soft, like freshly deposited sediment. We now know the age of the glaciation accurately from radiometric dating of the carbon-14 in logs buried in the drift. The drift of the last glaciation was deposited during one of the most recent epochs of geologic time, the Pleistocene, which lasted from 1.8 million to 10,000 years ago. Along the east coast of the United States, the southernmost advance of this ice is recorded by the enormous sand and drift deposits of the terminal moraines that form Long Island and Cape Cod.

It soon became clear that there were multiple glacial ages during the Pleistocene, with warmer interglacial intervals between them. As geologists mapped glacial deposits in the late nineteenth century, they became aware that there were several layers of drift, the lower ones corresponding to earlier ice ages. Between the older layers of glacial material were well-developed soils containing fossils of warm-climate plants. These soils were evidence that the glaciers retreated as the climate warmed. By the early part of the twentieth century, scientists believed that four distinct glaciations had affected North America and Europe during the Pleistocene epoch.

This idea was modified in the late twentieth century, when geologists and oceanographers examining oceanic sediment found fossil evidence of warming and cooling of the oceans. Ocean sediments presented a much more complete geologic record of the Pleistocene than continental glacial deposits did. The fossils buried in Pleistocene and earlier ocean sediments were of foraminifera—small, single-celled marine organisms that secrete shells of calcium carbonate, or calcite. These shells differ in their proportion of ordinary oxygen (oxygen-16) and the heavy oxygen isotope (oxygen-18). The ratio of oxygen-16 to oxygen-18 found in the calcite of a foraminifer's shell depends on the temperature of the water in which the organism lived. Different ratios in the shells preserved in various layers of sediment reveal the temperature changes in the oceans during the Pleistocene epoch.

Isotopic analysis of shells allowed geologists to measure another glacial effect. They could trace the growth and shrinkage of continental glaciers, even in parts of the ocean where there may have been no great change in temperature—around the equator, for example. The oxygen isotope ratio of the ocean changes as a great deal of water is withdrawn from it by evaporation and is precipitated as snow to form glacial ice. During glaciations, the lighter oxygen-16 has a greater tendency to evaporate from the ocean surface than the heavier oxygen-18 does. Thus, more of the heavy isotope is left behind in the ocean and absorbed by marine organisms. From this analysis of marine sediments, geologists have learned that there were many shorter, more regular cycles of glaciation and deglaciation than geologists had recognized from the glacial drift of the continents alone.

1. The word **“accumulations”** in the passage is closest in meaning to
  - (A) signs
  - (B) pieces
  - (C) types
  - (D) deposits
2. The word **“heterogeneous”** in the passage is closest in meaning to
  - (A) remaining
  - (B) varied
  - (C) familiar
  - (D) layered
3. According to paragraph 1, what persuaded Louis Agassiz that glaciation in the past had been widespread?
  - (A) Geologic differences between mountain valleys and flat plains
  - (B) The presence of similar glacial material in many different regions
  - (C) Geologic research on mountain glaciers in the Alps
  - (D) Evidence of regional differences in the drift caused by glacial erosion
4. The word **“enjoy”** in the passage is closest in meaning to
  - (A) experience
  - (B) resemble
  - (C) expect
  - (D) dominate
5. It can be inferred from paragraph 2 that Agassiz and other geologists of his time were not able to determine
  - (A) which geographic regions had been covered with ice sheets in the last ice age
  - (B) the exact dates at which drifts had been deposited during the last ice age
  - (C) the exact composition of the drifts laid during the last ice age
  - (D) how far south along the east coast of the United States the ice had advanced during the last ice age
6. According to paragraph 3, what did geologists conclude as a result of finding well-developed soils containing warm-climate plant fossils between layers of glacial drift?
  - (A) There had been only one warm period before the Pleistocene epoch.
  - (B) There had been multiple periods of mild weather between ice ages.
  - (C) Several glacial periods occurred after the Pleistocene epoch.
  - (D) Some earlier epochs were warmer than the Pleistocene.
7. According to paragraph 3 and 4, scientists modified their theory about the exact number of glaciations because of evidence obtained from
  - (A) ocean sediments
  - (B) interglacial soils
  - (C) glacial deposits
  - (D) air samples
8. The word **“reveal”** in the passage is closest in meaning to
  - (A) result from
  - (B) vary from
  - (C) show
  - (D) preserve
9. According to paragraph 4, scientists use foraminifera shells to learn about Pleistocene ocean conditions by
  - (A) measuring the amount of calcium carbonate present in the shells
  - (B) determining the proportion of shell in each layer of sediment
  - (C) comparing shells deposited during the Pleistocene with those buried earlier
  - (D) calculating the relative quantity of two oxygen isotopes in the calcite
10. It can be inferred from paragraph 5 that foraminifera fossil shells containing calcite with high percentages of oxygen-16 were deposited at times when

- (A) polar ice extended as far as equatorial regions of land and sea
- (B) extensive glaciation was not occurring
- (C) there were no great increases in ocean temperature
- (D) there was heavy snowfall on continental glaciers

**11. In paragraph 5, why does the author include the information that “The oxygen isotope ratio of the ocean changes as a great deal of water is withdrawn from it by evaporation and is precipitated as snow to form glacial ice.” ?**

- (A) To explain how scientists were able to calculate how frequently the continental ice sheets expanded and contracted
- (B) To explain how scientists have determined that there was no great change in ocean temperatures at the equator during past glaciations
- (C) To provide evidence that oxygen-16 has a greater tendency to evaporate than does oxygen-18
- (D) To suggest that equatorial marine organisms absorb more heavy isotopes than do marine organisms elsewhere

**12. According to the passage, when did scientists begin to realize that more than one ice age had occurred?**

- (A) In the mid nineteenth century
- (B) In the late nineteenth century
- (C) In the early twentieth century
- (D) In the late twentieth century

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In his view, there could be no other explanation for the composition of such drift.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Louis Agassiz was the first to note signs of glacial erosion and sedimentation in diverse regions of Europe and North America.

**Answer choices**

- (A) Evidence of a pattern of glacier-like deposits eventually convinced most geologists that an enormous continental glacier had extended into the temperate zone.
- (B) Glacial research showed that many layers of ice were deposited, with each new period of glaciation extending farther south than the one before.
- (C) Isotopic analysis of marine sediments showed that periods of glaciation and deglaciation were more frequent, shorter, and more cyclic than previously thought.
- (D) Nineteenth-century geologists came to accept the idea that the areas covered by polar ice had reached as far as the equator, a far larger area than Agassiz had thought.
- (E) Nineteenth-century geologists studying the layers of drift concluded that during the Pleistocene epoch, several glaciations had occurred with warm periods between them.
- (F) Research involving foraminifera fossil shells show that ocean temperatures in the Northern Hemisphere varied greatly during the most extensive periods of glaciation.

### 参考答案与解析

1. 选 **D**。accumulation 积累，答案 D 的 deposit。
2. 选 **B**。heterogeneous 异质的，答案是 varied。
3. 选 **B**。人名多次出现，所以单纯使用人名作为关键词不好，配合 glacial 冰川做关键词。总共出现两次，第一次是第一句介绍这个人，与答案无关；第二次是说这个人在不同的地方都发现了冰蚀和沉积痕迹，所以答案是 B。D 的 regional difference 说反；A 的 geologic difference 原文没说，C 答非所问。
4. 选 **A**。enjoy 经历，所以 experience 正确。enjoy 大家都认识，是喜欢，享受的意思，答案当中只有 experience 最为接近。
5. 选 **B**。此题关键词不好找，所以排除法较好。A 的 last ice age 做关键词定位至倒数第二句，说 last glaciation 的沉积时间，往下看就看到美国东海岸，所以沉积的地区是能确定的，不选；B 的 date 做关键词定位至倒数第三句，说现在知道了冰川的年龄，根据时间对比，也就是以前不知道，恰恰是答案，所以 B 正确；C 的 composition 成分做关键词定位至最后一句，说 drift 是 moraine，所以成分是知道的；D 的 how far south 做关键词定位至第二句的 temperate climate，所以 D 也是错的。
6. 选 **B**。以 warm-climate plant fossils 做关键词定位至第三句，但这句没说结论是什么，往下看，下句说这些土壤是冰川后退的证据，所以正确答案是 B。注意 C 的 several glacial periods 不对，原文说的是有若干个暖期。
7. 选 **A**。以 modified their theory 做关键词定位至第一句，说改变了 idea 的原因是他们看了 oceanic sediment 里面的化石，所以证据是来自 ocean sediment 的，答案是 A。
8. 选 **C**。reveal 揭示，揭开，所以 show 正确。
9. 选 **D**。根据 foraminifera 关键词去读第四段，说贝壳里的  $^{16}\text{O}$  和  $^{18}\text{O}$  比例不同，而其不同的比例揭示了海洋中温度的变化；再看选项，只有 D 提到了同位素，因此选 D。
10. 选 **B**。以  $^{16}\text{O}$  做关键词定位至第四句，说在冰期时候， $^{16}\text{O}$  更容易蒸发，使得海水中的  $^{18}\text{O}$  就多，反过来  $^{16}\text{O}$  就多，也就是说，问题问的应该是暖期，所以答案是 B，不存在广泛的冰川。ACD 三项说的都是冷期，所以都说反了。
11. 选 **A**。修辞目的题，修辞点所在句子整个就是一个例子，所以往前看，前一句说科学家们能够分析冰川的进退，所以答案是 A。B 是前句的一个细节，C 和 D 没说。
12. 选 **B**。此题答案简单，只有两个时间，而且是要找全文的，所以使用排除法。在第三段最后一句找到二十世纪，往附近看，本段第二句说十九世纪晚期人们发现有很多层沉积物，下部的沉积物对应早期的冰期，也就是发现有多次冰期出现，所以正确的时间应该是在十九世纪晚期，所以答案是 B。
13. 选 **D**。三个插入点，代词词组 his view 和 such drift，还有名词 other explanation，这道题比较特殊，只有一个插入点就够了，因为 such drift 必须放在 drift 第一次出现之后，所以只剩下 D 可能，代入其他插入点后也都能说得通。
14. 选 **ACE**。A 选项对应原文第二段第二句，正确；B 选项原文没说，不选；C 选项对应原文第五段最后一句，正确；D 选项不选；E 选项对应原文第五段第一句，正确；F 选项原文没说，不选。

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## The Roman Army's Impact on Britain

**In the wake of the Roman Empire's conquest of Britain in the first century A.D., a large number of troops stayed in the new province, and these troops had a considerable impact on Britain with their camps, fortifications, and participation in the local economy.** Assessing the impact of the army on the civilian population starts from the realization that the soldiers were always unevenly distributed across the country. Areas rapidly incorporated into the empire were not long affected by the military. Where the army remained stationed, its presence was much more influential. The imposition of a military base involved the requisition of native lands for both the fort and the territory needed to feed and exercise the soldiers' animals. The imposition of military rule also robbed local leaders of opportunities to participate in local government, so social development was stunted and the seeds of disaffection sown. This then meant that the military had to remain to suppress rebellion and organize government.

Economic exchange was clearly very important as the Roman army brought with it very substantial spending power. Locally\* a fort had two kinds of impact. Its large population needed food and other supplies. ■ Some of these were certainly brought from long distances, but demands were inevitably placed on the local area. ■ Although goods could be requisitioned, they were usually paid for, and this probably stimulated changes in the local economy. ■ When not campaigning, soldiers needed to be occupied; otherwise they represented a potentially dangerous source of friction and disloyalty. ■ Hence a writing tablet dated 25 April tells of 343 men at one fort engaged on tasks like shoemaking, building a bathhouse, operating kilns, digging clay, and working lead. Such activities had a major effect on the local area, in particular with the construction of infrastructure such as roads, which improved access to remote areas.

Each soldier received his pay, but in regions without a developed economy there was initially little on which it could be spent. The pool of excess cash rapidly stimulated a thriving economy outside fort gates. Some of the demand for the services and goods was no doubt fulfilled by people drawn from far afield, but some local people certainly became entwined in this new economy. There was informal marriage with soldiers, who until AD 197 were not legally entitled to wed, and whole new communities grew up near the forts. These settlements acted like small towns, becoming centers for the artisan and trading populations.

The army also provided a mean of personal advancement for auxiliary soldiers recruited from the native peoples, as a man obtained hereditary Roman citizenship on retirement after service in an auxiliary regiment. Such units recruited on an ad hoc (as needed) basis from the area in which they were stationed, and there was evidently large-scale recruitment within Britain. The total numbers were at least 12,500 men up to the reign of the emperor Hadrian (A.D. 117–138), with a peak around A.D. 80. Although a small proportion of the total population, this perhaps had a massive local impact when a large proportion of the young men were removed from an area. Newly raised regiments were normally transferred to another province from whence it was unlikely that individual recruits would ever return. Most units raised in Britain went elsewhere on the European continent, although one is recorded in Morocco. The reverse process brought young men to Britain, where many continued to live after their 20 to 25 years of service, and this added to the cosmopolitan Roman character of the frontier population. By the later Roman period, frontier garrisons (groups of soldiers) were only rarely transferred, service in units became effectively hereditary, and forts were no longer populated or maintained at full strength.

This process of settling in as a community over several generations, combined with local recruitment, presumably accounts for the apparent stability of the British northern frontier in the later Roman period. It also explains why some of the forts continued in occupation long after Rome ceased to have any formal authority in Britain, at the beginning of the fifth century A.D. The circumstances that had allowed natives to become Romanized also led the self-sustaining military community of the frontier area to become effectively British.

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\*With respect to a particular place or situation

1. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Many Roman soldiers remained in Britain after conquering it, and their presence had a strong influence.
  - (B) The new Roman province of Britain seemed to awaken in the first century A.D. as the local economy improved.
  - (C) Camps, fortifications, and economic change contributed to the Roman conquest of Britain.
  - (D) With the conquest of Britain by Roman troops, the Roman Empire gained considerable economic strength.
2. **According to paragraph 1, the Roman army had the most influence on those areas of Britain that were**
  - (A) conquered first
  - (B) near population centers
  - (C) used as military bases
  - (D) rapidly incorporated into the empire
3. **According to paragraph 1, what effect did military occupation have on the local population?**
  - (A) It encouraged more even distribution of the population and the settlement of previously undeveloped territory.
  - (B) It created discontent and made continuing military occupation necessary.
  - (C) It required local labor to construct forts and feed and exercise the soldiers' animals.
  - (D) It provided local leaders with opportunities to participate in governance.
4. **The word "suppress" in the passage is closest in meaning to**
  - (A) respond to
  - (B) warn against
  - (C) avoid the impact of
  - (D) stop by force
5. **The word "friction" in the passage is closest in meaning to**
  - (A) rebellion
  - (B) conflict
  - (C) neglect
  - (D) crime
6. **The author mentions "343 men at one fort engaged on tasks like shoemaking, building a bathhouse, operating kilns, digging clay, and working lead" in order to**
  - (A) describe the kinds of tasks soldiers were required to perform as punishment for disloyalty or misdeeds
  - (B) illustrate some of the duties assigned to soldiers to keep them busy and well-behaved when not involved in military campaigns
  - (C) provide evidence that Roman soldiers had a negative effect on the local area by performing jobs that had been performed by native workers
  - (D) argue that the soldiers would have been better employed in the construction of infrastructure such as roads
7. **The phrase "entitled to" in the passage is closest in meaning to**
  - (A) given the right to
  - (B) able to afford to
  - (C) encouraged to
  - (D) required to
8. **According to paragraph 3, how did the soldiers meet their needs for goods and services?**
  - (A) Their needs were met by the army, and all of their economic transactions took place within the fort.
  - (B) Most of their needs were met by traveling tradespeople who visit the forts.
  - (C) During their days off, soldiers traveled to distant towns to make purchases.
  - (D) They bought what they needed from the artisans and traders in nearby towns.

9. According to paragraph 4, which of the following is true of Britain's auxiliary regiments of the Roman army?
- (A) Membership in these regiments reached its highest point during the reign of the emperor Hadrian.
  - (B) Most of the units recruited in Britain were sent to Morocco and other stations outside Europe.
  - (C) Soldiers served in the regiments for many years and after retirement generally stayed where they had been stationed.
  - (D) Most of the regiments stationed on the frontier were new units transferred from a neighboring province.
10. According to paragraph 4, all of the following changes could be seen in the frontier garrisons by the later Roman period EXCEPT
- (A) Membership in the units passed from father to son.
  - (B) Fewer soldiers were stationed at the forts.
  - (C) Soldiers usually were not transferred to different locations.
  - (D) Frontier units became more effective and proficient.
11. Why does the author mention that "some of the forts continued in occupation long after Rome ceased to have any formal authority in Britain"?
- (A) To emphasize the degree to which the stability of the British northern frontier depended on firm military control
  - (B) To suggest that the Romans continued to occupy Britain even after they had formally given up the right to do so
  - (C) To support the claim that forts continued to serve an important economic function even after they ceased to be of any military use
  - (D) To describe one of the things that resulted from frontier garrisons' becoming part of the local community over a long period
12. The word "circumstances" in the passage is closest in meaning to
- (A) experiences
  - (B) communities
  - (C) conditions
  - (D) laws
13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.
- One solution was to keep them busy as sources of labor.
- Where would the sentence best fit?
14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.
- The Roman army's occupation of Britain influenced and changed the local population.
- Answer choices**
- (A) Although the presence of the army in certain areas caused resentment among the local population, it provided important services such as building infrastructure.
  - (B) By recruiting unemployed young men for its auxiliary units, the army made it possible for them to stay in their home towns and provide financial support for their families.
  - (C) Large quantities of cash from soldiers' pay stimulated development, but also drove up prices, making it hard for local residents to afford goods and services.
  - (D) Though the army appropriated land and some goods, it also paid for many supplies, stimulating local economic growth.
  - (E) The forts contributed to the quality of local crafts by bringing in artisans from distant places who brought with them new skills and techniques.
  - (F) Roman soldiers started families with local inhabitants, and over the generations, the military community became a stable part of British society.

### 参考答案与解析

1. 选 **A**。原文 in 的部分是非主要成分，结构是军队呆在 blabla，并且有影响，所以答案是 A。B 将原文的非重要成分 awake，C 将原文的非主要成分 fortification 变成了主要部分，改变了句子结构，都错；D 的 economic strength 原文没说，错。
2. 选 **C**。以 area 和 most influence 做关键词定位至第四句，说军队一直驻扎的地方，影响最深远，所以答案是 C，作为军事基地的地方。B 和 D 都明显不靠谱，A 的 conquer first 最先占领并不一定是一直驻扎，军事基地才是。
3. 选 **B**。以 local population 做关键词定位至倒数第二句，说军事驻扎剥夺了当地人参加政府的权力，使发展停滞，种下仇恨的种子，然后又说这种仇恨使军事驻扎持续，所以正确答案是 B。A 和 C 原文没说，D 与原文相反。
4. 选 **D**。suppress 镇压，所以 stop by force 正确。
5. 选 **B**。friction 摩擦，所以正确答案是 B 冲突。
6. 选 **B**。修辞目的题，修辞点所在句子只是单纯说出例子，所以不是答案，往前看，前面这句话上题已经读过，说士兵必须有事做，否则就会闹事儿，紧接着就给出 343 名士兵做这做那，所以 343 名士兵做事是士兵必须有事做的一个例子，答案是 B。
7. 选 **A**。entitle 授权，所以正确答案是 A。
8. 选 **D**。以 goods and services 做关键词定位至第三句，说远方来的人满足了士兵对于商品和服务的需求，正确答案是 D。A 的 army 和 C 的 soldiers travel 明显不对；B 有一定迷惑性，但原文说一些本地人也参与其中，没说谁满足得多，所以大部分的 need 都是 tradespeople 满足的是错的。
9. 选 **C**。以 Britain's auxiliary regiments 做关键词定位至倒数第三句，注意第一句虽然有 auxiliary regiment，但不是英国的，而是罗马的，所以不是第一句。原句说英国的部队都去了欧洲其他国家，有一个分队在摩洛哥，其他国家的部队来到英国，很多人服役了 20 到 25 年之后留在英国，所以答案是 C。A 的 Hadrian 和 D 的 neighboring province 原文没说；B 的 most 与原文相反，因为原文说只有一个分队被送到摩洛哥。
10. 选 **D**。EXCEPT 题，排除法，A 的 from father to son 做关键词定位至最后一句的 hereditary，正确，不选；B 的 fort 做关键词定位至最后一句，正确，不选；C 的 transfer to different location 做关键词定位至最后一句，正确，不选；D 原文完全没说，所以错，选。
11. 选 **D**。修辞目的题，修辞点所在句子单纯说了一个例子，而且 it also explain 也说明英国往前看，前一句说定居在一个地方需要经过若干代人，这种行为能够解释英国北部边界的稳定性，所以答案是 D，其他的都没说。
12. 选 **C**。circumstance 情况，答案是 condition。
13. 选 **D**。三个过渡点，名词 source of labor，名词 solution 和词组 keep them busy，keep them busy 与 occupied 同义替换，所以 C 或者 D 正确；D 之后的 343 men 与 source of labor 是同义替换，所以 D 是答案。
14. 选 **ADF**。A 选项对应第二段最后一句，正确；B 选项中的 unemployed men 原文没说，不选；C 选项前半句正确，但后半句的 drive up price 原文没说，不选；D 选项对应原文第二段，正确；E 选项原文没说，不选；F 选项对应原文第五段第一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Succession, Climax, and Ecosystems**

In the late nineteenth century, ecology began to grow into an independent science from its roots in natural history and plant geography. The emphasis of this new “community ecology” was on the composition and structure of communities consisting of different species. In the early twentieth century, the American ecologist Frederic Clements pointed out that a succession of plant communities would develop after a disturbance such as a volcanic eruption, heavy flood, or forest fire. An abandoned field, for instance, will be invaded successively by herbaceous plants (plants with little or no woody tissue), shrubs, and trees, eventually becoming a forest. Light-loving species are always among the first invaders, while shade-tolerant species appear later in the succession.

Clements and other early ecologists saw almost lawlike regularity in the order of succession, but that has not been substantiated. A general trend can be recognized, but the details are usually unpredictable. Succession is influenced by many factors: the nature of the soil, exposure to sun and wind, regularity of precipitation, chance colonizations, and many other random processes.

The final stage of a succession, called the climax by Clements and early ecologists, is likewise not predictable or of uniform composition. There is usually a good deal of turnover in species composition, even in a mature community. The nature of the climax is influenced by the same factors that influenced succession.

Nevertheless, mature natural environments are usually in equilibrium. They change relatively little through time unless the environment itself changes.

For Clements, the climax was a “superorganism,” an organic entity. Even some authors who accepted the climax concept rejected Clements’ characterization of it as a superorganism, and it is indeed a misleading metaphor. An ant colony may be legitimately called a superorganism because its communication system is so highly organized that the colony always works as a whole and appropriately according to the circumstances. But there is no evidence for such an interacting communicative network in a climax plant formation. Many authors prefer the term “association” to the term “community” in order to stress the looseness of the interaction.

Even less fortunate was the extension of this type of thinking to include animals as well as plants. This resulted in the “biome,” a combination of coexisting flora and fauna. Though it is true that many animals are strictly associated with certain plants, it is misleading to speak of a “spruce-moose biome,” for example, because there is no internal cohesion to their association as in an organism. The spruce community is not substantially affected by either the presence or absence of moose. Indeed, there are vast areas of spruce forest without moose. The opposition to the Clementsian concept of plant ecology was initiated by Herbert Gleason, soon joined by various other ecologists. Their major point was that the distribution of a given species was controlled by the habitat requirements of that species and that therefore the vegetation types were a simple consequence of the ecologies of individual plant species.

**With “climax,” “biome,” “superorganism,” and various other technical terms for the association of animals and plants at a given locality being criticized, the term “ecosystem” was more and more widely adopted for the whole system of associated organisms together with the physical factors of their environment.** Eventually, the energy-transforming role of such a system was emphasized. Ecosystems thus involve the circulation, transformation, and accumulation of energy and matter through the medium of living things and their activities. The ecologist is concerned primarily with the quantities of matter and energy that pass through a given ecosystem, and with the rates at which they do so.

Although the ecosystem concept was very popular in the 1950s and 1960s, it is no longer the dominant paradigm. ■ Gleason’s arguments against climax and biome are largely valid against ecosystems as well. ■ Furthermore, the number of interactions is so great that they are difficult to analyze, even with the help of large computers. Finally, younger ecologists have found ecological problems involving behavior and life-history adaptations more attractive than measuring physical constants. ■ Nevertheless, one still speaks of the ecosystem when referring to a local association of animals and plants, usually without paying much attention to the energy aspects. ■

1. **According to paragraph 2, which of the following is a criticism of Clements' view of succession?**
  - (A) The principles of succession are more lawlike than Clements thought they are.
  - (B) More evidence is needed to establish Clements' predictions about succession.
  - (C) The details of succession are affected by random processes.
  - (D) Many of the factors that determine which plants will grow in an environment, such as the nature of the soil and the exposure to sun, do not change at all.
2. **The word "substantiated" in the passage is closest in meaning to**
  - (A) confirmed
  - (B) noticed
  - (C) defined
  - (D) publicized
3. **The word "trend" in the passage is closest in meaning to**
  - (A) probability
  - (B) picture
  - (C) lawlike regularity
  - (D) tendency
4. **The word "likewise" in the passage is closest in meaning to**
  - (A) sometimes
  - (B) similarity
  - (C) apparently
  - (D) consequently
5. **The word "legitimately" in the passage is closest in meaning to**
  - (A) commonly
  - (B) broadly
  - (C) properly
  - (D) officially
6. **According to paragraph 4, why do many authors prefer the term "association" to "community" when describing a climax plant formation?**
  - (A) Because the term "association" does not suggest the presence of a tight network involving interactive communication.
  - (B) Because the term "association" indicates that the grouping is not necessarily beneficial to all members.
  - (C) Because the term "community" indicates continuing dynamic development that a climax formation does not have.
  - (D) Because the term "community" suggests an organization that has been designed for a specific purpose.
7. **In paragraph 5, the author challenges the idea of a "biome" by noting that**
  - (A) there are usually no very strong connections among the plants and animals living in a place
  - (B) plants and animals respond in the same way to the same circumstances
  - (C) particular combinations of flora and fauna do not generally come about purely by chance
  - (D) some animals are dependent on specific kinds of plants for food
8. **Why does the author make the statement, "Indeed, there are vast areas of spruce forest without moose."?**
  - (A) To highlight a fact whose significance the ecologist Herbert Gleason had missed
  - (B) To propose the idea that a spruce forest is by itself a superorganism
  - (C) To emphasize that moose are not limited to a single kind of environment
  - (D) To criticize the idea of a spruce-moose biome
9. **The word "initiated" in the passage is closest in meaning to**
  - (A) approved
  - (B) identified
  - (C) started
  - (D) foreseen

**10. According to paragraph 5, Gleason's opposition to the Clementsian views of plant ecology was based on the claim that plant species grow in places where**

- (A) they can enter into mutually beneficial relationships with other species
- (B) conditions suit them, regardless of whether particular other species are present
- (C) habitats are available for a wide variety of plant and animal species
- (D) their requirements are met, and those of most other species are not

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Unlike the terms "climax," "biome," and "superorganism," which refer to the particular association of plants and animals at a given location, the term "ecosystem" refers specifically to the physical factors within an environment.
- (B) The terms "climax," "biome," "superorganism," and "ecosystem" all refer to the system of plants and animals in an associated environment, but some are more controversial than others.
- (C) When the older terms of ecology became too technical, they were replaced by the more popular and more widely used term "ecosystem."
- (D) The term "ecosystem" gradually replaced discredited terms for the combination of a physical environment and the plants and animals living together in it.

**12. According to paragraph 6, what did ecologists mainly study when the ecosystem concept was the dominant paradigm?**

- (A) The physical factors present in different environments
- (B) The typical activities of animals and the effect of those activities on plants
- (C) The rates at which ecosystems changed from one kind to another
- (D) The flow of energy and matter through ecosystems

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

They may be more interested in researching, for example, the adaptations that some aquatic animals undergo to survive in dry desert environments.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The study of the combination of plant species that inhabit a particular locality became a scientific discipline toward the end of the nineteenth century.

**Answer choices**

- (A) Areas that are recovering from serious disturbances like volcanic eruptions and heavy floods provide special opportunities to observe the development of plant communities.
- (B) Whether a given species will be found in a given ecosystem strongly depends on what other species it would interact with in that ecosystem.
- (C) Computer-aided studies of entire system of associated organisms together with their environment provide a solid basis for current studies of specific ecological problems.
- (D) According to the earliest theories of ecology, the development of plant communities proceeds in lawlike fashion and results in stable climax communities.
- (E) The idea of associations of plants and animals that function as "superorganisms" was later rejected by biologists who saw no strong evidence in support of that idea.
- (F) The once popular idea of communities as integrated ecosystems has been largely rejected by modern ecologists, who are more interested in problems involving behavior and adaptations.

### 参考答案与解析

1. 选 **C**。本段较短，可以快速扫完，也可以用人名和 succession 做关键词定位至最后一句，说很多因素都可以影响 succession，所以正确答案是 C。D 提到了 many factors，但 change 是原文没说的，错；A 的比较原文没说，错；B 是最具有迷惑性的选项，因为原文说没有被证实，也就是已经建立了只是没证实，但 B 说需要更多证据来建立 Clemens 的预测，也就是没建立，而且预测也不对，所以 B 错。
2. 选 **A**。substantiate 证实，答案是 confirm。
3. 选 **D**。trend 趋势，所以 D 的 tendency 正确。
4. 选 **B**。likewise 同样地，所以 similarly 正确。
5. 选 **D**。legitimately 合法地，答案是 D 官方。
6. 选 **A**。修辞目的题，先读修辞点所在句子，原句说为了强调这种互动的松散性，很多作者更愿意使用 association，原文都说了是为了强调松散性，所以答案是 A，不存在紧密的 network。其他答案，原文都没有提及。
7. 选 **A**。以 biome 做关键词定位至第二句，由于这句只是给出了 biome 的概念，没有 challenge，所以往下看，下句说尽管有些动物与植物的关系是紧密的，但还是不能说 biome，比如他们之间没有 internal cohesion，所以答案是 A，动植物之间没有紧密关系。B 和 C 原文都没讲；D 的 food 原文也没说，而且 D 也不是 challenge 上文提到的概念的，所以不对。
8. 选 **D**。修辞目的题，修辞点就是一个句子，所以看前一句，前句说 spruce 种群不受 moose 是否存在的影 响，依然还是一个例子，所以看中心句，注意这段文字的中心句不是第一句，而是上一题中提到的第二句，说 spruce-moose biome 是不对的，所以答案是 D。
9. 选 **C**。initiate 开始，所以正确答案是 started。
10. 选 **B**。以 Christian 和 species 做关键词定位至最后两句，倒数第二句说反对，最后一句说反对的原因，物种的分布取决于环境，只是自身生态学的结果。也就是跟其他物种无关，所以答案是 B。既然说跟其他物种无关，A 和 D 就不对，C 也说了大量物种，与原文不同。
11. 选 **D**。原句当中的 with 结构是非主要成分，主要成分是采用了 ecosystem 形容生物和环境的 associated system，正确答案 D。A 的后半句错，eco 不是单指 physical factor，而是系统；B 和 C 都错在将原句的主干和非主干混合，不选。
12. 选 **D**。以 ecologist 做关键词定位至最后一句，说生态学家最关注的是特定生态系统里物质与能量的传递及其速率，所以答案是 D。A 和 B 都没说，C 的 rate 原文有说，但原文说的是物质和能量传递的速率，不是答案说的 ecosystem 改变的速率，所以 C 错。
13. 选 **C**。两个过渡点，they 和名词 adaption，从名词 adaption 可以得出 B 或者 C 正确；代词 they 指的是倒数第二句中的 younger ecologists，所以 they 应该放在名词之后，所以 B 错 C 对。
14. 选 **DEF**。A 选项是第一段中的一个细节，但提供研究机会原文完全没讲，不选；B 选项与第五段的最后一句相反，不选；C 选项与第七段第三句说反，而且即使说对也是个细节，不选；D 选项对应原文第二和第三段的首句，正确；E 选项对应原文第四段第二句，正确；F 选项对应原文第七段第一句，正确。

### 笔记区

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用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Westward Migration**

The story of the westward movement of population in the United States is, in the main, the story of the expansion of American agriculture—of the development of new areas for the raising of livestock and the cultivation of wheat, corn, tobacco, and cotton. After 1815 improved transportation enabled more and more western farmers to escape a self-sufficient way of life and enter a national market economy. During periods when commodity prices were high, the rate of westward migration increased spectacularly. “Old America seemed to be breaking up and moving westward,” observed an English visitor in 1817, during the first great wave of migration. Emigration to the West reached a peak in the 1830’s. Whereas in 1810 only a seventh of the American people lived west of the Appalachian Mountains, by 1840 more than a third lived there.

Why were these hundreds of thousands of settlers—most of them farmers, some of them artisans—drawn away from the cleared fields and established cities and villages of the East? Certain characteristics of American society help to explain this remarkable migration. The European ancestors of some Americans had for centuries lived rooted to the same village or piece of land until some religious, political, or economic crisis uprooted them and drove them across the Atlantic. Many of those who experienced this sharp break thereafter lacked the ties that had bound them and their ancestors to a single place. Moreover, European society was relatively stratified; occupation and social status were inherited. In American society, however, the class structure was less rigid; some people changed occupations easily and believed it was their duty to improve their social and economic position. As a result, many Americans were an inveterately restless, rootless, and ambitious people. Therefore, these social traits helped to produce the nomadic and daring settlers who kept pushing westward beyond the fringes of settlement. In addition, there were other immigrants who migrated west in search of new homes, material success, and better lives.

**The West had plenty of attractions: the alluvial river bottoms, the fecund soils of the rolling forest lands, the black loams of the prairies were tempting to New England farmers working their rocky, sterile land and to southeastern farmers plagued with soil depletion and erosion.** In 1820 under a new land law, a farm could be bought for \$100. The continued proliferation of banks made it easier for those without cash to negotiate loans in paper money. Western Farmers borrowed with the confident expectation that the expanding economy would keep farm prices high, thus making it easy to repay loans when they fell due.

Transportation was becoming less of a problem for those who wished to move west and for those who hand farm surpluses to send to market. ■ Prior to 1815, western farmers who did not live on navigable waterways were connected to them only by dirt roads and mountain trails. ■ Livestock could be driven across the mountains, but the cost of transporting bulky grains in this fashion was several times greater than their value in eastern markets. ■ The first step toward an improvement of western transportation was the construction of turnpikes. ■ These roads made possible a reduction in transportation costs and thus stimulated the commercialization of agriculture along their routes.

Two other developments presaged the end of the era of turnpikes and started a transportation revolution that resulted in increased regional specialization and the growth of a national market economy. First came the steamboat; although flatboats and keelboats continued to be important until the 1850’s steamboats eventually superseded all other craft in the carrying of passengers and freight. Steamboats were not only faster but also transported upriver freight for about one tenth of what it had previously cost on hand-propelled keelboats. Next came the Erie Canal, an enormous project in its day, spanning about 350 miles. After the canal went into operation, the cost per mile of transporting a ton of freight from Buffalo to New York City declined from nearly 20 cents to less than 1 cent. Eventually, the western states diverted much of their produce from the rivers to the Erie Canal, a shorter route to eastern markets.

1. **What can be inferred from paragraph 1 about western farmers prior to 1815?**
  - (A) They had limited their crop production to wheat, corn, tobacco, and cotton.
  - (B) They were able to sell their produce at high prices.
  - (C) They had not been successful in raising cattle.
  - (D) They did not operate in a national market economy.
2. **What is the purpose of the statement, “Whereas in 1810 only a seventh of the American people lived west of the Appalachian Mountains, by 1840 more than a third lived there.”?**
  - (A) To illustrate that generally population shifts occur rapidly
  - (B) To correct a mistaken impression of American agriculture from 1810 to 1840
  - (C) To emphasize the range and speed with which the westward migration occurred
  - (D) To demonstrate how attractive the Appalachian Mountains were to Americans
3. **The word “fringes” in the passage is closest in meaning to**
  - (A) borders
  - (B) groups
  - (C) types
  - (D) directions
4. **According to paragraph 2, all of the following are reasons why Americans migrated westward EXCEPT**
  - (A) the desire to move from one place to the next
  - (B) the hope of improving their socioeconomic status
  - (C) the opportunity to change jobs
  - (D) the need to escape religious or political crises
5. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Because the West had more rivers and forests than the East, its soil was more productive.
  - (B) The fertile soils of the West drew farmers from regions with barren soils.
  - (C) Farmers living in western areas of the United States were more affected by soil erosion than farmers living in eastern areas.
  - (D) The soil in western areas of the United States was richer than soil in eastern areas.
6. **According to paragraph 3, what was the significance of the land law passed in 1820?**
  - (A) It granted government-supported loans to farmers.
  - (B) It provided farmland at an affordable price.
  - (C) It required banks to offer loans to farmers.
  - (D) It enabled farmers to sell their land for a profit.
7. **The word “proliferation” in the passage is closest in meaning to**
  - (A) growth
  - (B) cooperation
  - (C) importance
  - (D) success
8. **Paragraph 4 suggests that turnpikes affected farmers by**
  - (A) making the price of grain uniform for both eastern and western farmers
  - (B) making western farm products more profitable than eastern farm products
  - (C) allowing farmers to drive their livestock across mountain trails
  - (D) allowing a greater number of farmers to sell their farm products in a commercial market
9. **The word “superseded” in the passage is closest in meaning to**
  - (A) replaced
  - (B) reformed
  - (C) equaled
  - (D) increased
10. **The word “diverted” in the passage is closest in meaning to**
  - (A) collected

- (B) shifted
- (C) transported
- (D) sold

**11. Which of the following can be inferred from paragraph 5 about flatboats and keelboats?**

- (A) They ceased to be used as soon as the first turnpikes were built.
- (B) They were slower and more expensive to operate than steamboats.
- (C) They were used for long-distance but not for regional transportation.
- (D) They were used primarily on the Erie Canal.

**12. Paragraph 5 mentions that the Erie Canal led to a reduction in all of the following EXCEPT**

- (A) the length of the route that goods from the West traveled across to reach eastern markets
- (B) the cost of transporting freight
- (C) the price of produce from western states
- (D) the amount of produce from western states that was shipped on rivers

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In fact, goods could be shipped more cheaply across the much greater distance of the Atlantic Ocean than they could from western New York to coastal cities.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The westward movement of population across the United States led to expanded agricultural production.

**Answer choices**

- (A) The desire to improve their livelihood often inspired people to move west.
- (B) Among the people who moved to the western United States were a number of artisans.
- (C) The fertility of western farmland as well as favorable government policies supported agricultural gains.
- (D) Steamboats were originally used to transport passengers rather than freight.
- (E) Commercial farming in the West was greatly enhanced by improvements in land and water transportation.
- (F) The transportation revolution resulted in regional economies that operated independently of a national market economy.

**笔记区**

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## 参考答案与解析

1. 选 **D**。以 1815 做关键词定位至第二句，说 1815 年之后，交通的改善使得更多农民不再自给自足，进入全国范围内的市场经济，也就是说 1815 年之前是自给自足不参与市场经济的，所以答案是 D。其他选项都无关。
2. 选 **C**。修辞目的题，先读例子所在句子，说向西的移民潮在 30 年代达到顶峰，接着就给出具体数字来解释，所以是为了说明移民的数量和范围很广，之所以说范围，是因为例子提到阿巴拉契亚山脉以西，所以答案是 C。A 只说速度，不全面；B 没有 mistaken view；D 说阿巴拉契亚有吸引力纯属扯淡。
3. 选 **A**。fringe 边缘，次要，答案是 border。
4. 选 **D**。EXCEPT 题，但这道题用正选更好。以 reason 做关键词定位至第二句的 explain，定位不到的话就看首句，往下看也能看到。第一个原因说了欧洲人一直住在一个地方，而美国人不是，对应答案 A；第二个原因说欧洲社会等级森严，换工作没那么容易，而美国刚好相反，分别对应 C 和 B 选项，所以 D 没有对应，答案是 D。
5. 选 **B**。本句的主干就是西部有很多吸引人之处。所以答案是 B，ACD 的比较原文都没说。
6. 选 **B**。以 1820 做关键词定位至第二句，说 1820 年通过的新法案使农民可以用 100 USD 买土地，后面又说银行业的兴盛使得那些没钱的人能得到纸币贷款，所以是农民买得起土地，正确答案是 B。A 的 government-support，C 的 require 和 D 的 sell 都没说。
7. 选 **A**。proliferation 扩张，增殖，答案 growth。
8. 选 **D**。以 turnpike 做关键词定位至后面两句，说改善运输状况的第一步是建公路，使得运输和农业的成本降低，所以答案是 D 鼓励人们卖东西。A 东西价格相等，B 的比较和 C 的 mountain trail 完全没提，都不选。
9. 选 **A**。supersede 代替，所以 replace 是答案。
10. 选 **B**。divert 转移，使分心，所以 shift 正确。
11. 选 **B**。以两种船做关键词定位至第二句，说最终蒸汽船代替了原有的两种船，没有答案，往下看，说蒸汽船不仅快而且便宜，也就是说前面的两种慢而且不便宜，所以答案是 B，A 说反，C 和 D 没线索推得出来。
12. 选 **C**。EXCEPT 题，排除法。A 的 length of the route 做关键词定位至最后一句，a shorter route，正确，不选；同时看到部分运输被分到 EC 上，所以河上运的东西就少了，所以 D 的 shipped on river 有下降，D 也正确，不选；B 的 cost 和 freight 做关键词定位至倒数第二句，说从 20 下降到 1，所以也下降了，不选；C 的 price 原文无对应，所以 C 错，选，不要自己想运输成本下降了价格就一定会下降。
13. 选 **C**。三个过渡点，名词 goods，副词 cheaply 和 in fact。根据 goods 与第一句的 surpluses 可能同意重现，A 可能对，根据 goods 与 livestock 的可能同意重现判断 B 或 C 可能对；cheaply 和 in fact 结合判断前句必须与价格有关，所以 B 或者 C 对，但 in fact 与 B 前面的句子不搭，所以 C 是答案。
14. 选 **ACE**。A 选项对应原文第二段第三句，正确；B 选项是第二段中的一个细节，不选；C 选项对应原文第三段第一句和第二句，正确；D 选项与原文与第五段细节说反，不选；E 选项对应原文第五段，正确；F 选项与原文第一段第二句说反，不选。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Early Settlements in the Southwest Asia**

The universal global warming at the end of the Ice Age had dramatic effects on temperate regions of Asia, Europe, and North America. Ice sheets retreated and sea levels rose. ■ The climatic changes in southwestern Asia were more subtle, in that they involved shifts in mountain snow lines, rainfall patterns, and vegetation cover. ■ However, these same cycles of change had **momentous** impacts on the sparse human populations of the region. ■ At the end of the Ice Age, no more than a few thousand foragers lived along the eastern Mediterranean coast, in the Jordan and Euphrates valleys. Within 2,000 years, the human population of the region numbered in the tens of thousands, all as a result of village life and farming. ■ Thanks to new environmental and archaeological discoveries, we now know something about **this remarkable change** in local life.

Pollen samples from freshwater lakes in Syria and elsewhere tell us forest cover expanded rapidly at the end of the Ice Age, for the southwestern Asian climate was still cooler and considerably wetter than today. Many areas were richer in animal and plant species than they are now, making them highly favorable for human occupation. About 9000 B.C., most human settlements lay in the area along the Mediterranean coast and in the Zagros Mountains of Iran and their foothills. Some local areas, like the Jordan River valley, the middle Euphrates valley, and some Zagros valleys, were more **densely** populated than elsewhere. Here more sedentary and more complex societies flourished. These people **exploited** the landscape intensively, foraging on hill slopes for wild cereal grasses and nuts, while hunting gazelle and other game on grassy lowlands and in river valleys. Their settlements contain exotic objects such as **seashells, stone bowls, and artifacts made of obsidian** (volcanic glass), all traded from afar. This considerable volume of intercommunity exchange brought a degree of social complexity in its wake.

Thanks to extremely fine-grained excavation and extensive use of flotation methods (through which seeds are recovered from soil samples), we know a great deal about the foraging practices of the inhabitants of Abu Hureyra in Syria's Euphrates valley. Abu Hureyra was founded about 9500 B.C, a small village settlement of **cramped** pit dwellings (houses dug partially in the soil) with reed roofs supported by wooden uprights. For the next 1,500 years, its inhabitants enjoyed a somewhat warmer and damper climate than today, living in a well-wooded steppe area where wild cereal grasses were abundant. They subsisted off spring migrations of Persian gazelles from the south. With such a favorable location, about 300 to 400 people lived in a sizable, permanent settlement. They were no longer a series of small bands but lived in a large community with more elaborate social organization, probably grouped into clans of people of common descent.

The flotation samples from the excavations allowed botanists to study **shifts** in plant-collecting habits as if they were looking through a telescope at a changing landscape. Hundreds of tiny plant remains show how the inhabitants exploited nut harvests in nearby pistachio and oak forests. However, as the climate dried up, the forests retreated from the vicinity of the settlement. The inhabitants turned to wild cereal grasses instead, collecting them by the thousands, while the percentage of nuts in the diet fell. By 8200 B.C., drought conditions were so severe that the people abandoned their long-established settlement, perhaps dispersing into smaller camps.

Five centuries later, about 7700 B.C., a new village rose on the mound. At first the inhabitants still hunted gazelle intensively. Then, about 7000 B.C., within the space of a few generations, they switched **abruptly** to herding domesticated goats and sheep and to growing einkorn, pulses, and other cereal grasses. Abu Hureyra grew rapidly until it covered nearly 30 acres. It was a close-knit community of rectangular, one-story mud-brick houses, joined by narrow lanes and courtyards, finally abandoned about 5000 B.C. **Many complex factors led to the adoption of the new economies, not only at Abu Hureyra, but at many other locations such as 'Ain Ghazal, also in Syria, where goat toe bones showing the telltale marks of abrasion caused by foot tethering (binding) testify to early herding of domestic stock.**

1. The word “**momentous**” in the passage is closest in meaning to
  - (A) numerous
  - (B) regular
  - (C) very important
  - (D) very positive
2. Major climatic changes occurred by the end of the Ice Age in all of the following geographic areas **EXCEPT**
  - (A) temperate regions of Asia
  - (B) southwestern Asia
  - (C) North America
  - (D) Europe
3. The phrase “**this remarkable change**” in the passage refers to
  - (A) warming at the end of the Ice Age
  - (B) shifts in mountain snow lines
  - (C) the movement of people from farms to villages
  - (D) a dramatic increase in the population
4. The word “**exploited**” in the passage is closest in meaning to
  - (A) explored
  - (B) utilized
  - (C) inhabited
  - (D) improved
5. Why does the author mention “**seashells, stone bowls, and artifacts made of obsidian**”?
  - (A) To give examples of objects obtained through trade with other societies
  - (B) To illustrate the kinds of objects that are preserved in a cool climate
  - (C) To provide evidence that the organization of work was specialized
  - (D) To give examples of the artistic ability of local populations
6. The word “**cramped**” in the passage is closest in meaning to
  - (A) primitive
  - (B) secure
  - (C) extended
  - (D) confined
7. Paragraph 3 suggests which of the following about the settlement of Abu Hureyra?
  - (A) The settlement was inhabited by small groups of people from nearby areas.
  - (B) Small bands of people migrated in and out of the settlement.
  - (C) The location of the settlement made permanent development difficult.
  - (D) The easy availability of food led to the growth of the settlement.
8. The word “**shifts**” in the passage is closest in meaning to
  - (A) effects
  - (B) similarities
  - (C) changes
  - (D) exceptions
9. Paragraph 4 suggests that the people of Abu Hureyra abandoned their long-established settlement **because**
  - (A) the inhabitants had cleared all the trees from the forests
  - (B) wild cereal grasses took over pistachio and oak forests
  - (C) people wanted to explore new areas
  - (D) lack of rain caused food shortages
10. According to paragraph 5, after 7000 B.C. the settlement of Abu Hureyra differed from earlier settlements at that location in all of the following **EXCEPT**
  - (A) the domestication of animals
  - (B) the intensive hunting of gazelle
  - (C) the size of the settlement

(D) the design of the dwellings

**11. The word “abruptly” in the passage is closest in meaning to**

- (A) informally
- (B) briefly
- (C) suddenly
- (D) surprisingly

**12. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) In many areas besides Abu Hureyra, complex factors led to new economies including the herding of domestic stock.
- (B) In 'Ain Ghazal and Syria, domestic stock was more important than it was at Abu Hureyra.
- (C) Once early methods of herding animals improved, new economies were adopted.
- (D) Many complex theories attempt to explain the early domestication of animals.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

One of the major effects was the rapid growth of the human population itself.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

At the end of the Ice Age, patterns of human settlement changed in southwestern Asia.

**Answer choices**

- (A) Wild cereals, grasses, and nuts were exchanged for exotic objects.
- (B) Changes in climatic conditions made southwestern Asia highly beneficial to human occupants.
- (C) Social organization in Abu Hureyra decreased as the population grew.
- (D) The favorable location of Abu Hureyra kept the city from experiencing hardship during drought years.
- (E) Within 2,000 years, populations in southwestern Asia greatly increased in number.
- (F) In rich, fertile areas permanent societies evolved to a high level of complexity.

### 参考答案与解析

1. 选 **C**。momentous 重大的，选 very important。
2. 选 **B**。EXCEPT 题，排除法。ACD 都集中在第一句，只有 B 没有提到，所以答案是 B。
3. 选 **D**。指代题，往前看，前一句说由于农业和城镇的发展，人口成千上万，紧接着就说 this change，说要这个变化指的就是人口的增长，所以答案是 D。
4. 选 **B**。exploit 开采，利用，所以 utilize 正确。
5. 选 **A**。修辞目的题，先看例子所在句子，说定居点里包含很多通过贸易获得的外来物品，诸如 blabla，所以这些东西都是外来品，A 是正确答案。BCD 都没说。
6. 选 **D**。cramped 局促的，狭隘的，难以辨认的，所以 confined 正确。
7. 选 **D**。以 AH 做关键词定位至第一句的后半句和第二句的前半句，但一直在说 AH 是怎么回事，只得往下看，说接下来的 1500 年里，他们所在的地方气候温暖，种子丰富，所以答案是 D。C 说反了，A 和 B 没提及。
8. 选 **C**。shift 转变，所以答案是 change。
9. 选 **D**。以 abandoned long established settlement 做关键词定位至最后一句，说干旱如此严重，使他们放弃了原来的住所，所以放弃的原因是因为 lack of rain，正确答案是 D，其他都不是原因。
10. 选 **B**。EXCEPT 题，排除法。A 的 domestication 做关键词定位至第二句，说驯养的动物不同，所以 A 正确，不选；B 的 gazelle 做关键词定位至第二句，这只是 7700 BC 的事儿，不是不同也不是变化，所以 B 错，选；C 的 size 做关键词定位至第三句的 30 acre，所以 C 对，不选；D 的 design 和 dwelling 定位至倒数第二句，正确，不选。
11. 选 **C**。abruptly 突然，正确答案是 suddenly。
12. 选 **A**。原句的结构是诸多复杂因素导致 economy 的采用，所以正确答案是 A。BCD 都缺失原文主干，不选。
13. 选 **C**。两个过渡点，分别是名词 population 和名词 effect，但根据这两个名词确定的答案都是 B 或者 C。但原文 B 之后有一个 however，而且 B 之后的 these cycles of change 和之前的 change 过渡紧密，所以 B 错 C 对。
14. 选 **BEF**。A 选项原文没说，不选，原文说的是可以交换；B 选项对应第四段第二句，不直接对应，但后文说干旱之后人们就放弃了，所以干旱之前就是对人们好，所以这个答案正确；C 选项与第三段最后一句相反，不选；D 选项与第四段最后一句相反，不选；E 选项对应原文第一段倒数第二句，正确；F 选项对应原文第三段最后一句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Fossil Preservation**

When one considers the many ways by which organisms are completely destroyed after death, it is remarkable that fossils are as common as they are. Attack by scavengers and bacteria, chemical decay, and destruction by erosion and other geologic agencies make the odds against preservation very high. However, the chances of escaping complete destruction are vastly improved if the organism happens to have a mineralized skeleton and dies in a place where it can be quickly buried by sediment. Both of these conditions are often found on the ocean floors, where shelled invertebrates (organisms without spines) flourish and are covered by the continuous rain of sedimentary particles. Although most fossils are found in marine sedimentary rocks, they also are found in terrestrial deposits left by streams and lakes. On occasion, animals and plants have been preserved after becoming immersed in tar or quicksand, trapped in ice or lava flows, or engulfed by rapid falls of volcanic ash.

The term “fossil” often implies petrification, literally a transformation into stone. After the death of an organism, the soft tissue is ordinarily consumed by scavengers and bacteria. **The empty shell of a snail or clam may be left behind, and if it is sufficiently durable and resistant to dissolution, it may remain basically unchanged for a long period of time.** Indeed, unaltered shells of marine invertebrates are known from deposits over 100 million years old. In many marine creatures, however, the skeleton is composed of a mineral variety of calcium carbonate called aragonite. Although aragonite has the same composition as the more familiar mineral known as calcite, it has a different crystal form, is relatively unstable, and in time changes to the more stable calcite.

Many other processes may alter the shell of a clam or snail and enhance its chances for preservation. Water containing dissolved silica, calcium carbonate, or iron may circulate through the enclosing sediment and be deposited in cavities such as marrow cavities and canals in bone once occupied by blood vessels and nerves. In such cases, the original composition of the bone or shell remains, but the fossil is made harder and more durable. This addition of a chemically precipitated substance into pore spaces is termed “permineralization.”

Petrification may also involve a simultaneous exchange of the original substance of a dead plant or animal with mineral matter of a different composition. This process is termed “replacement” because solutions have dissolved the original material and replaced it with an equal volume of the new substance. Replacement can be a marvelously precise process, so that details of shell ornamentation, tree rings in wood, and delicate structures in bone are accurately preserved.

■ Another type of fossilization, known as carbonization, occurs when soft tissues are preserved as thin films of carbon. ■ Leaves and tissue of soft-bodied organisms such as jellyfish or worms may accumulate, become buried and compressed, and lose their volatile constituents. ■ The carbon often remains behind as a blackened silhouette. ■

Although it is certainly true that the possession of hard parts enhances the prospect of preservation, organisms having soft tissues and organs are also occasionally preserved. Insects and even small invertebrates have been found preserved in the hardened resins of conifers and certain other trees. X-ray examination of thin slabs of rock sometimes reveals the ghostly outlines of tentacles, digestive tracts, and visual organs of a variety of marine creatures. Soft parts, including skin, hair, and viscera of ice age mammoths, have been preserved in frozen soil or in the oozing tar of oil seeps.

The probability that actual remains of soft tissue will be preserved is improved if the organism dies in an environment of rapid deposition and oxygen deprivation. Under such conditions, the destructive effects of bacteria are diminished. The Middle Eocene Messel Shale (from about 48 million years ago) of Germany accumulated in such an environment. The shale was deposited in an oxygen-deficient lake where lethal gases sometimes bubbled up and killed animals. Their remains accumulated on the floor of the lake and were then covered by clay and silt. Among the superbly preserved Messel fossils are insects with iridescent exoskeletons (hard outer coverings), frogs with skin and blood vessels intact, and even entire small mammals with preserved fur and soft tissue.

1. The word “**agencies**” in the passage is closest in meaning to
  - (A) combinations
  - (B) problems
  - (C) forces
  - (D) changes
2. In paragraph 1, what is the author’s purpose in providing examples of how organisms are destroyed?
  - (A) To emphasize how surprising it is that so many fossils exist
  - (B) To introduce a new geologic theory of fossil preservation
  - (C) To explain why the fossil record until now has remained incomplete
  - (D) To compare how fossils form on land and in water
3. The word “**terrestrial**” in the passage is closest in meaning to
  - (A) land
  - (B) protected
  - (C) alternative
  - (D) similar
4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) When snail or clam shells are left behind, they must be empty in order to remain durable and resist dissolution.
  - (B) Although snail and clam shells are durable and resist dissolving, over time they slowly begin to change.
  - (C) Although the soft parts of snails or clams dissolve quickly, their hard shells resist dissolution for a long time.
  - (D) Empty snail or clam shells that are strong enough not to dissolve may stay in their original state for a long time.
5. Why does the author mention “**aragonite**” in the passage?
  - (A) To emphasize that some fossils remain unaltered for millions of years
  - (B) To contrast fossil formation in organisms with soft tissue and in organisms with hard shells
  - (C) To explain that some marine organisms must undergo chemical changes in order to fossilize
  - (D) To explain why fossil shells are more likely to survive than are fossil skeletons
6. The word “**enhance**” in the passage is closest in meaning to
  - (A) control
  - (B) limit
  - (C) combine
  - (D) increase
7. Which of the following best explains the process of permineralization mentioned in paragraph 3?
  - (A) Water containing calcium carbonate circulates through a shell and deposits sediment.
  - (B) Liquid containing chemicals hardens an already existing fossil structure.
  - (C) Water passes through sediment surrounding a fossil and removes its chemical content.
  - (D) A chemical substance enters a fossil and changes its shape.
8. The word “**precise**” in the passage is closest in meaning to
  - (A) complex
  - (B) quick
  - (C) exact
  - (D) reliable
9. Paragraph 5 suggests which of the following about the carbonization process?
  - (A) It is completed soon after an organism dies.
  - (B) It does not occur in hard-shell organisms.
  - (C) It sometimes allows soft-tissued organisms to be preserved with all their parts.
  - (D) It is a more precise process of preservation than is replacement.

**10. The word “prospect” in the passage is closest in meaning to**

- (A) completion
- (B) variety
- (C) possibility
- (D) speed

**11. According to paragraph 7, how do environments containing oxygen affect fossil preservation?**

- (A) They increase the probability that soft-tissued organisms will become fossils.
- (B) They lead to more bacteria production.
- (C) They slow the rate at which clay and silt are deposited.
- (D) They reduce the chance that animal remains will be preserved.

**12. According to the passage, all of the following assist in fossil preservation EXCEPT**

- (A) the presence of calcite in an organism’s skeleton
- (B) the presence of large open areas along an ocean floor
- (C) the deposition of a fossil in sticky substances such as sap or tar
- (D) the rapid burial of an organism under layers of silt

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

But the evidence of past organic life is not limited to petrification.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The remains of ancient life are amazingly well preserved in the form of fossils.

**Answer choices**

- (A) Environmental characteristics like those present on ocean floors increase the likelihood that plant and animal fossils will occur.
- (B) Fossils are more likely to be preserved in shale deposits than in deposits of clay and silt.
- (C) The shells of organisms can be preserved by processes of chemical precipitation or mineral exchange.
- (D) Freezing enables the soft parts of organisms to survive longer than the hard parts.
- (E) Comparatively few fossils are found in the terrestrial deposits of streams and lakes.
- (F) Thin films of carbon may remain as an indication of soft tissue or actual tissue may be preserved if exposure to bacteria is limited.

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **C**。agency 代理，作用，所以答案是 force。
2. 选 **A**。修辞目的题，修辞点所在句是一个例子，所以往前看，前一句说 fossil 遭破坏的方式和 fossil 一样多，后面就跟了很多破坏的方式，所以答案是 A，阐释为什么如此多破坏之下还有这么多化石存在。往后看也可以，下一句说如果化石有骨架的话被保留的机会会大增，也就是一直都在说化石存留下来的机会，所以 A 是正确答案。
3. 选 **A**。terrestrial 陆地的，所以正确答案是 A。
4. 选 **D**。原句的结构是并列加条件，所以正确答案是 D。A 的 must be empty 原文没说；B 和 C 的关系都错误；D 说的是 shell 会被剩下，如果足够耐腐蚀，就能保存一段时间。
5. 选 **C**。修辞目的题，先看例子所在句子，说很多海洋生物的骨骼包含 calcite，没有答案，往前看，前一句说一亿年前的沉积物中能发现骨骼不变的海生无脊椎动物，与 A 靠谱，但 A 本身不是一个观点，所以 A 不对；B 和 D 完全没说，不对；强调的中心在例子所在句的下一句，说 aragonite 的晶体形状不同，相对不那么稳定，会变成更稳定的形式，所以答案是 C，想稳定的话必须再变。
6. 选 **D**。enhance 提升，答案是 D 的 increase。
7. 选 **B**。以 permineralization 做关键词定位至最后一句。说将 chemically precipitate 的物质加入 precipitate 的过程叫做 permineralization，this 指代前文，所以往前看，前面说血管和神经占据的空隙会被充填，骨头和壳体会留下来，变得更坚固，所以答案是 B，变得更坚硬。A 的包含 calcium 不全面，而且原文的变硬也没说；C 的 remove chemical content 和 D 的 change shape 都没说。
8. 选 **C**。precise 精确的，所以 C 的 exact 正确。
9. 选 **B**。此段较短，完全可以快速扫完，当然用排除法也比较好。A 错，原文说生命死后要经过若干过程才会 carbonization，所以 A 的 soon 明显错；B 正确，原文明确指出 carbonization 发生在柔软组织中，当然也就不会发生在硬壳动物身上；C 的 all their parts 和 D 的比较原文都没说，都错。
10. 选 **C**。prospect 展望，前景，possibility 正确。
11. 选 **D**。以 oxygen 做关键词定位至第一句，说如果快速埋藏，并且在缺氧环境下，化石保存的概率会增加，也就是说氧的存在不利于化石的保存，所以正确答案是 D，A 与 D 刚好完全相反，所以 A 错，也说明两个相反的有一个对；C 完全没说；B 错，原文说缺氧能减轻细菌的破坏作用，但并不意味着有氧细菌就会变多，所以 B 没说。
12. 选 **B**。EXCEPT 题，排除法，由于考全文，应该关注各段开头。A 的 skeleton 和 calcite 做关键词定位至第六段首句，正确，不选；B 的 ocean floor 在原文中虽然有出现，但 open areas 没有，所以 B 错，选；C 的 sap or tar 做关键词定位至第六段最后一句，正确，不选；D 的 rapid burial 和 layer of silt 做关键词定位至第七段第一句，正确，不选。
13. 选 **A**。如果找名词过渡，最容易找到的当属 petrification，但遗憾的是，整段中既没有 petrification，也没有同义词替换，这段段首已经开始说 carbonization，也就是说 petrification 应该是上一段或者下一段说的，也就是 A 或者 D 正确，但待插入句说不仅限于，也就是前面已经说过 petrification 了，所以 A 对 D 错。
14. 选 **ACF**。A 选项对应原文首段第三句，正确；B 选项的比较原文没说，不选；C 选项对应原文第三段最后一句和第四段开头句，正确；D 选项在原文第六段结尾捎带提了一下，但没说比较，不选；E 选项与原文第一段倒数第二句说反，不选；F 选项对应原文第五段和第七段开头，正确。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## Geothermal Energy

Earth's internal heat, fueled by radioactivity, provides the energy for plate tectonics and continental drift, mountain building, and earthquakes. It can also be harnessed to drive electric generators and heat homes. Geothermal energy becomes available in a **practical** form when underground heat is transferred by water that is heated as it passes through a subsurface region of hot rocks (a heat reservoir) that may be hundreds or thousands of feet deep. ■ The water is usually naturally occurring groundwater that seeps down along fractures in the rock; less typically, the water is artificially introduced by being pumped down from the surface. ■ The water is brought to the surface, as a liquid or steam, through holes drilled for the purpose. ■

By far the most **abundant** form of geothermal energy occurs at the relatively low temperatures of 80° to 180° centigrade. ■ Water circulated through heat reservoirs in this temperature range is able to extract enough heat to warm residential, commercial, and industrial spaces. More than 20,000 apartments in France are now heated by warm underground water drawn from a heat reservoir in a geologic structure near Paris called the Paris Basin. Iceland sits on a volcanic structure known as the Mid-Atlantic Ridge. Reykjavik, the capital of Iceland, is entirely heated by geothermal energy derived from volcanic heat.

Geothermal reservoirs with temperatures above 180° centigrade are useful for generating electricity. They occur primarily in regions of recent volcanic activity as hot, dry rock; natural hot water; or natural steam. The latter two sources are limited to those few areas where surface water seeps down through underground faults or fractures to reach deep rocks heated by the recent activity of molten rock material. The world's largest supply of natural steam occurs at The Geysers, 120 kilometers north of San Francisco, California. In the 1990s enough electricity to meet about half the needs of San Francisco was being generated there. This facility was then in its third decade of production and was beginning to show signs of decline, perhaps because of over development. By the late 1990s some 70 geothermal electric-generating plants were in operation in California, Utah, Nevada, and Hawaii, generating enough power to supply about a million people. Eighteen countries now generate electricity using geothermal heat.

Extracting heat from very hot, dry rocks presents a more difficult problem: the rocks must be fractured to permit the circulation of water, and the water must be provided artificially. The rocks are fractured by water pumped down at very high pressures. Experiments are under way to develop technologies for **exploiting** this resource.

Like most other energy sources, geothermal energy presents some environmental problems. The surface of the ground can **sink** if hot groundwater is withdrawn without being replaced. In addition, water heated geothermally can contain salts and **toxic materials** dissolved from the hot rock. These waters present a disposal problem if they are not returned to the ground from which they were removed.

The contribution of geothermal energy to the world's energy future is difficult to estimate. **Geothermal energy is in a sense not renewable, because in most cases the heat would be drawn out of a reservoir much more rapidly than it would be replaced by the very slow geological processes by which heat flows through solid rock into a heat reservoir.** However, in many places (for example, California, Hawaii, the Philippines, Japan, Mexico, the rift valleys of Africa) the resource is potentially so large that its future will depend on the economics of production. At present, we can make efficient use of only naturally occurring hot water or steam deposits. Although the potential is enormous, it is likely that in the near future geothermal energy can make important local contributions only where the resource is close to the user and the economics are favorable, as they are in California, New Zealand, and Iceland. Geothermal energy probably will not make large-scale contributions to the world energy budget until well into the twenty-first century, if ever.

1. **According to the processes described in paragraph 1, what is the relationship between radioactivity and the steam produced by geothermal heat?**
  - (A) Geothermally heated steam is produced when water is exposed to radioactivity deep underground.
  - (B) When water is introduced into holes drilled thousands of feet in the ground, it becomes radioactive and turns to steam.
  - (C) Radioactivity heats Earth's interior rock, which in turn can heat water to the point it becomes steam.
  - (D) When a reservoir of steam in subsurface rock is produced by radioactivity, it is said to be geothermally heated.
2. **The word "practical" in the passage is closest in meaning to**
  - (A) usable
  - (B) plentiful
  - (C) economical
  - (D) familiar
3. **The word "abundant" in the passage is closest in meaning to**
  - (A) economical
  - (B) familiar
  - (C) plentiful
  - (D) useful
4. **According to paragraph 2, which of the following is true about heat reservoirs with a temperature in the range of 80° to 180° centigrade?**
  - (A) They are under international control.
  - (B) They are more common than reservoirs that have a higher temperature.
  - (C) Few of them produce enough heat to warm large industrial spaces.
  - (D) They are used to generate electricity.
5. **According to paragraph 3, what is the connection between underground faults and naturally occurring steam?**
  - (A) Underground faults enable the heat from molten-rock material to escape upward to regions where it can heat surface water enough to produce steam.
  - (B) Underground faults are created by steam that is produced in geothermal reservoirs deep inside Earth.
  - (C) Underground faults create spaces in which natural steam is sometimes trapped.
  - (D) Underground faults allow surface water to reach deep rocks that are hot enough to turn it into steam.
6. **In paragraph 3, why does the author mention that in the 1990s The Geysers was in its third decade of production?**
  - (A) To provide the historical context of the geothermal production of electricity in the United States
  - (B) To imply that The Geysers was the first geothermal site to be put into production in California
  - (C) To help explain the signs of decline shown by The Geysers
  - (D) To explain why 70 new geothermal sites were put into electricity production in the late 1990s
7. **Which of the following can be inferred from paragraphs 2 and 3 about geothermal reservoirs?**
  - (A) Volcanic heat is associated only with geothermal reservoirs that have a temperature over 180° centigrade.
  - (B) More countries produce power from geothermal reservoirs than use them for heating buildings.
  - (C) Most geothermal reservoirs are suitable for producing electricity.
  - (D) A higher geothermal reservoir temperature is needed to generate electricity than is needed to heat homes.
8. **According to paragraph 4, extracting heat from very hot, dry rocks is difficult in part because**
  - (A) the underground rock must be fractured before heat can be removed from it
  - (B) the water above the rock is under very high pressure
  - (C) the rock breaks apart when water is pumped into it
  - (D) the water circulated through the rock must be much cooler than the rock itself
9. **The word "exploiting" in the passage is closest in meaning to**
  - (A) locating
  - (B) increasing
  - (C) making use of
  - (D) estimating the size of
10. **How is the problem that the surface may sink related to the problem that water heated geothermally may contain toxic materials?**
  - (A) Both problems could be solved by returning groundwater that is removed from an underground heat reservoir back to the reservoir after heat is extracted from it.

- (B) The problem of sinking is more difficult to solve than is the problem of toxic materials.
- (C) Land at the surface sinks because the rock beneath the surface is weakened when salts and toxic materials are removed from it in the process of extracting geothermal energy.
- (D) Both problems are caused by the fact that the hot groundwater in a heat reservoir dissolves the rock, which weakens the rock and makes the water toxic with salt.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Heat flows through solid rock very slowly, so it takes a very long time for geological processes to produce a reservoir of geothermal energy.
- (B) Geothermal energy is not renewable because heat flows very slowly through solid rock into or out of a heat reservoir.
- (C) The heat quickly removed from a heat reservoir is replaced so slowly by geological processes that geothermal energy is not practically speaking, renewable.
- (D) In most cases, heat travels into a heat reservoir so slowly that it is a much quicker process to remove the heat from a reservoir than to replace it.

**12. In paragraph 6, the author implies that in California, Hawaii, the Philippines, Japan, Mexico, and the rift valleys of Africa the potential size of the geothermal resource is so large that**

- (A) it might be economically worth developing these sites even though geothermal energy is not renewable
- (B) these sites will be the first geothermal energy sites to be developed with new technology
- (C) these sites are likely to make a large-scale contribution to the world energy budget in the twenty-first century
- (D) it does not matter whether they have naturally occurring deposits of hot water or steam

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In either case, the heated water will usually be under considerable pressure, and so may have a temperature that is well above its sea-level boiling point of 100° centigrade.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Heat reservoirs in the form of hot rock far beneath Earth's surface are a potential source of usable geothermal energy.

**Answer choices**

- (A) Heat reservoirs with a temperature from 80° to 180° centigrade can be used, as in France and Iceland, to heat buildings.
- (B) A number of countries now use geothermal reservoirs that contain water or steam above 180° centigrade to generate electricity.
- (C) Most heat reservoirs with a temperature above 180° centigrade cannot be used for energy because they are usually too close to recent volcanic activity.
- (D) The sinking of land above heat reservoirs and other environmental problems arise when water is pumped into a heat reservoir under high pressure.
- (E) Experiments are under way to determine if geothermally heated waters could be used as a source of certain minerals that have been dissolved out of hot rocks deep within Earth.
- (F) A number of issues, including how to extract heat from reservoirs that do not have a natural supply of water, will significantly limit the use of geothermal energy for the foreseeable future.

## 参考答案与解析

1. 选 **C**。细节题，问 radioactivity 和 steam 的关系，所以找双关键词，分别定位至本段第一句和最后一句，第一句说 radioactivity 提供了地球的内热，最后一句说水变成蒸汽到达地表，水受热才能蒸汽，而这份热量是 geothermal energy 提供的，这就是二者的关系，所以答案是 C。A 的水暴露在 radioactive underground 时候 steam 产生没说；B 水变成 radioactive 没说；D 的 radioactivity 产生蒸汽更不靠谱。
2. 选 **A**。practical 实际的，答案是 A 的 usable。
3. 选 **C**。abundant 充足的，答案是 C 的 plentiful。
4. 选 **B**。以 80 到 180 度做关键词定位至第一句，说最丰富的 geothermal energy 是在 80 到 180 度范围内的，所以同义替换是 B 的 more common than higher temperature。A 的 international control 原文没说；C 与本段第二句说反；D 在下一段说高于 180 度的可以用来发电，所以 D 说反了。
5. 选 **D**。又是一个问两者关系的题，找双关键词，定位至第三句，说 natural hot water 和 natural steam 仅存在于那些地点，地表水通过 fault 或者 fracture 渗到地下，碰到被加热的 blabla，答案明显是 D。A 说 fault 使 heat 跑上来，和原文的方向说反了，原文是水跑下去；B 说 steam 创造了 fault 完全不靠谱；C 的 steam 被 trap 原文没说。
6. 选 **C**。修辞目的题，先读例子所在句，是细节，按照常规应该往前看，但前一句已经在上题看过，与答案无关，所以往下看，而且看下一句另外一个原因是因为代词 this，下句说 G 经历了 30 年的运作，已经显示衰败迹象，可能是因为过度开发，所以答案是 C，A 和 B 的内容原文没提；D 本身也是个细节。
7. 选 **D**。此题用排除法更快，A 与第二段首句说反，错；第二段只是说 geothermal energy 可以用来加热 building，没说 most，B 错；C 和 D 都可以从两段的首句看出来，第二段说最多的是在 80 到 180 度，第三段说发电需要 180 度以上，所以发电比别的温度高，D 对，C 说反。
8. 选 **A**。整个问题做关键词定位至第一句，说从 hot, dry rock 抽热量是特别难的，必须先 fracture rock，水也要人工引入，所以答案是 A。D 没说，B 和 C 原文确实有说，但没有回答为什么难，也就是那种答非所问选项，所以也不对。
9. 选 **C**。exploit 开发，C 的 making use of 正确。
10. 选 **A**。又是一个问两者关系的题，本来应该找双关键词，但这段实在太短，找关键词还不如读完，快速扫完之后发现这两件事情都是由于开采地下水引起的问题，而且最后一句说如果不把地下水补充回去就会有问题，所以答案是 A。两个问题之间是并列关系，既没有比较也没有因果，所以 B 和 C 都不对；D 的 dissolved 溶解原文没说。
11. 选 **C**。原句的结构是 geothermal energy 是不 renewable 的，因为 blabla，所以前面的结果一定要有，A 和 D 排除；原句的原因中有一个比较，说 draw out 比 replace 的快，C 重现了这个比较，B 没有，所以正确答案是 C。
12. 选 **A**。修辞目的题，先读细节所在句，说在这些资源如此充足的地方，资源的利用前景取决于 economies of production 生产经济，四个答案中只有 A 提到了开采是否划算的问题，所以答案是 A。B 和 D 原文直接没说；C 跑到最后一句去了，跟例子也没什么关系，注意倒数第二句也有例子，但是题目问的不是那个。
13. 选 **B**。这道题有一个过渡点就够了，in either case 说明正确插入点之前必须有两种情况，直接确定 B，因为之前有 usually 和 less typically 两种情况。
14. 选 **ABF**。A 选项对应原文第二段，正确，不要因为温度和国家把这个选项当成细节，即使当成细节，也可以凭其他选项都不对的排除法解决；B 选项对应原文第三段首句，正确，不要因为温度把这个选项当成细节；C 选项与原文第三段首句说反，不选；D 选项不知所云，好像有语法错误，说的应该是第五段的细节，或者是干脆没说，所以不选；E 选项对应原文第四段最后一句，但原文说的是利用热能，不是矿物，所以这个选项不选；F 选项对应原文第六段，正确。

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

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错误：     个

**The Origins of Agriculture**

How did it come about that farming developed independently in a number of world centers (the Southeast Asian mainland, Southwest Asia, Central America, lowland and highland South America, and equatorial Africa) at more or less the same time? Agriculture developed slowly among populations that had an extensive knowledge of plants and animals. ■ Changing from hunting and gathering to agriculture had no immediate advantages. ■ To start with, it forced the population to abandon the nomad's life and become sedentary, to develop methods of storage and, often, systems of irrigation. ■ While hunter-gatherers always had the option of moving elsewhere when the resources were exhausted, this became more difficult with farming. ■ Furthermore, as the archaeological record shows, the state of health of agriculturalists was worse than that of their contemporary hunter-gatherers.

Traditionally, it was believed that the transition to agriculture was the result of a worldwide population crisis. It was argued that once hunter-gatherers had occupied the whole world, the population started to grow everywhere and food became scarce; agriculture would have been a solution to this problem. We know, however, that contemporary hunter-gatherer societies control their population in a variety of ways. The idea of a world population crisis is therefore unlikely, although population pressure might have arisen in some areas.

Climatic changes at the end of the glacial period 13,000 years ago have been proposed to account for the emergence of farming. **The temperature increased dramatically in a short period of time (years rather than centuries), allowing for a growth of the hunting-gathering population due to the abundance of resources.** There were, however, fluctuations in the climatic conditions, with the consequences that wet conditions were followed by dry ones, so that the availability of plants and animals oscillated brusquely.

It would appear that the instability of the climatic conditions led populations that had originally been nomadic to settle down and develop a sedentary style of life, which led in turn to population growth and to the need to increase the amount of food available. Farming originated in these conditions. Later on, it became very difficult to change because of the significant expansion of these populations. It could be argued, however, that these conditions are not sufficient to explain the origins of agriculture. Earth had experienced previous periods of climatic change, and yet agriculture had not been developed.

It is archaeologist Steven Mithen's thesis, brilliantly developed in his book *The Prehistory of the Mind* (1996), that approximately 40,000 years ago the human mind developed cognitive fluidity, that is, the integration of the specializations of the mind: technical, natural history (geared to understanding the behavior and distribution of natural resources), social intelligence, and the linguistic capacity. Cognitive fluidity explains the appearance of art, religion, and sophisticated speech. Once humans possessed such a mind, they were able to find an imaginative solution to a situation of severe economic crisis such as the farming dilemma described earlier. Mithen proposes the existence of four mental elements to account for the emergence of farming: (1) the ability to develop tools that could be used intensively to harvest and process plant resources; (2) the tendency to use plants and animals as the medium to acquire social prestige and power; (3) the tendency to develop "social relationships" with animals structurally similar to those developed with people—specifically, the ability to think of animals as people (anthropomorphism) and of people as animals (totemism); and (4) the tendency to manipulate plants and animals.

The fact that some societies domesticated animals and plants, discovered the use of metal tools, became literate, and developed a state should not make us forget that others developed pastoralism or horticulture (vegetable gardening) but remained illiterate and at low levels of productivity; a few entered the modern period as hunting and gathering societies. It is anthropologically important to inquire into the conditions that made some societies adopt agriculture while others remained hunter-gatherers or horticulturalists. However, it should be kept in mind that many societies that knew of agriculture more or less consciously avoided it. Whether Mithen's explanation is satisfactory is open to contention, and some authors have recently emphasized the importance of other factors.

1. The word **"option"** in the passage is closest in meaning to
  - (A) choice
  - (B) benefit
  - (C) idea
  - (D) experience
2. According to paragraph 1, all of the following are advantages of hunting and gathering over agriculture EXCEPT
  - (A) It is a healthier lifestyle.
  - (B) It requires less knowledge of plants and animals.
  - (C) It does not need storage capabilities.
  - (D) It is not tied to any specific location.
3. The word **"therefore"** in the passage is closest in meaning to
  - (A) in theory
  - (B) obviously
  - (C) frequently
  - (D) as a result
4. Which of the following best describes the way paragraph 2 is organized?
  - (A) A possible explanation for a phenomenon is presented and then criticized.
  - (B) Two similar ways of accounting for a puzzling fact are considered.
  - (C) Early societies' response to a problem is contrasted with contemporary societies' response.
  - (D) A prehistoric development is first explained in traditional terms and then in contemporary terms.
5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The resources needed by the growing hunting and gathering population increased rapidly once temperatures rose.
  - (B) Dramatic temperature increases and the simultaneous growth of the hunting and gathering population led to the need for more resources.
  - (C) Higher temperatures led to the existence of increased resources, thus enabling the hunting and gathering population to grow.
  - (D) The dramatic temperature increase occurred during the few years when abundant resources allowed the hunting and gathering population to grow.
6. According to paragraph 3, the abundance of resources fluctuated sharply after the end of the glacial period because
  - (A) locally abundant resources were quickly exhausted by hunter-gatherers
  - (B) the temperature became much higher in some areas over others
  - (C) different types of plants and animals became available as the climate changed
  - (D) the amount of rainfall varied radically from one period to the next
7. It can be inferred from paragraph 4 that it was difficult for people to change from farming back to hunting and gathering because
  - (A) people had become more used to different types of food
  - (B) climatic conditions were no longer favorable for hunting and gathering
  - (C) populations had become too large to be supported by hunting and gathering
  - (D) the farmer's sedentary life was easier than the hunter-gatherer's nomadic life
8. Why does the author state that **"Earth had experienced previous periods of climatic change, and yet agriculture had not been developed."**?
  - (A) To suggest that climate change had occurred long before the development of agriculture
  - (B) To argue that climate change does not properly explain why agriculture developed
  - (C) To challenge the assumption that agriculture developed only in some parts of the world
  - (D) To question the claim that climate change occurred at the time when agriculture developed
9. The word **"imaginative"** in the passage is closest in meaning to
  - (A) complex

- (B) creative
- (C) immediate
- (D) reliable

**10. According to paragraph 5, Steven Mithen believes that all of the following contributed to the emergence of farming EXCEPT**

- (A) the development of a mind flexible enough to come up with solutions to complex problems
- (B) the tendency to use plants and animals to acquire power
- (C) the tendency to emphasize the differences between animals and people
- (D) the ability to make tools that could be used for the large-scale harvesting of plants

**11. The word “contention” in the passage is closest in meaning to**

- (A) investigation
- (B) improvement
- (C) debate
- (D) interpretation

**12. According to paragraph 6, which of the following is a weakness of Mithen’s explanation?**

- (A) It does not clearly distinguish agriculture from pastoralism and horticulture.
- (B) It fails to explain why some societies adopted agriculture while others did not.
- (C) It explains the domestication of plants and animals but not the development of metal tools.
- (D) It overlooks the fact that illiteracy and low productivity remain problems even today

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Because humans had built up this knowledge as hunter-gatherers, it is logical to conclude that over time they would have become extremely efficient.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

It is unclear why hunter-gatherers in different parts of the world independently developed agriculture at roughly the same time.

**Answer choices**

- (A) One obstacle to the transition from a nomadic lifestyle to the sedentary lifestyle required by agriculture was that hunter-gatherers had not developed storage techniques.
- (B) It seems unlikely that agriculture emerged in response to a food shortage brought on by a worldwide population crisis that developed once the whole world was occupied.
- (C) The origins of agriculture maybe linked to climate change at the end of the last ice age, but this does not explain why earlier climatic instability had not led to agriculture.
- (D) The only available means of understanding the social organization and technical abilities of ancient hunter-gatherer societies is the study of contemporary hunter-gatherers.
- (E) One recent theory suggests that the invention of agriculture was made possible by the integration of various mental capacities in the human mind.
- (F) Little is known about why only some societies that adopted agriculture rapidly progressed to using metal tools, becoming literate, and developing a state.

### 参考答案与解析

1. 选 **A**。option 选项，所以 A 的 choice 正确。
  2. 选 **B**。EXCEPT 题，排除法。A 的 healthier lifestyle 做关键词定位至最后一句，说游牧生活更健康，所以 A 对，不选；B 的 knowledge of plants and animals 做关键词定位至第二句，原文说在 knowledge 比较丰富的人们当中农业发展起来，但不能凭这个推出游牧生活的人知识就少，所以 B 错，选；C 的 storage 做关键词定位至第四句，说农业需要 develop storage method，所以游牧民族 storage 能力不那么好，C 对，不选；D 的 specific location 定位至倒数第二句，而且根据上题的答案，这个明显对，不选。
  3. 选 **D**。therefore 因此，答案是 D 的 as a result。
  4. 选 **A**。问全段如何组织，看开头，开头作者就说 traditionally，这个词的出现意味着全段可能存在转折，果然看第二句就有 it was argued，这和第一句观点不同，所以答案是 A，先提出，再批判。
  5. 选 **C**。注意 allowing 和 due to 的双重因果关系，温度上升使得 resource 丰富，再使得人口增长，所以答案是 C，很好地重复了这个双重因果。A 少了最终的结果，也就是人口；B 的 simultaneously 错；D 搞错了前面两个原因之间的关系。
  6. 选 **D**。fluctuate 做关键词定位至最后一句，说气候变化，先 wet 接着就干旱，导致 availability 也跟着波动，所以导致 resource 波动的原因是气候的干湿，所以答案是 D 的 rainfall 变化。A 和 B 完全没说，C 的不同种类的 plant and animal 没说。
  7. 选 **C**。以 change from farming back to hunting and gathering 做关键词定位至倒数第三句，原文说难以变回去的原因是因为人口的扩张，也就是农业时期人口多，游牧时期人口少，所以答案是 C，另外三个答案都没说。
  8. 选 **B**。修辞目的题，先读例子所在的一句话，说地球以前也有气候变化，但农业却没发展。由于整个句子都是例子，因此往前看，前一句说单靠上文的解释都无法解释农业的起源，也就
- 是说后文提到的气候变化不足以解释农业的起源，所以答案是 B。
9. 选 **B**。imaginative 想象力的，正确答案是 B。
  10. 选 **C**。EXCEPT 题，排除法。A 的 solutions 做关键词定位至第三句，说有解决问题的 mind，所以 A 对，不选；B 的 plants and animals 和 power 做关键词定位至三点中的第二点，B 正确，不选；C 的 difference 原文没说，所以 C 错，选；D 的 tools 定位至三点中的第一点，所以 D 对，不选。
  11. 选 **C**。contention 争论，答案是 C 的 debate。有人可能会误以为 contention 是 content（满足）的名词而误选了 improvement，但 content 本身就是名词，contention 是 **contend（争论）** 的名词。
  12. 选 **B**。问他的解释有什么问题，以人名做关键词定位至最后一句，但最后一句我们已经看过了，没说缺点，所以往前看，前面说有的民族定居有的民族游牧，又说有些已经掌握农业技术的人在或多或少地避免农业，然后就说了 M 的解释值得争议，也就是 M 没能很好地解释这一情况发生的原因，所以答案是 B，A 说不能区分是错的，原文还是区分的；C 和 D 原文都没说。
  13. 选 **A**。此题简单，一个过渡点就够，待插入句说 this knowledge，所以之前必有 knowledge，所以答案是 A。排除法也可以解决，B 后面的 to start with 开始说插入点之前的 no immediate advantages，所以不插入任何句子；C 之后说搬家变难，对应 C 之前的 sedentary；D 之后的 furthermore 递进衔接紧密，不插入任何句子。
  14. 选 **BCE**。A 选项是第一段的一个细节，不选；B 选项对应原文第二段第二句，正确；C 选项对应原文第四段最后两句，正确；D 选项没发现有哪一段在说这个选项，不选；E 选项整个第五段都在说这个答案，正确；F 貌似与原文第六段首句相关，但原文说我们不能因为有的很先进就忘了不先进的，选项说不知道原因，说的完全不是一回事儿，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Autobiographical Memory**

Think back to your childhood and try to identify your earliest memory. How old were you? ■ Most people are not able to recount memories for experiences prior to the age of three years, a phenomenon called infantile amnesia. ■ The question of why infantile amnesia occurs has intrigued psychologists for decades, especially in light of **ample** evidence that infants and young children can display impressive memory capabilities. ■ Many find that understanding the general nature of autobiographical memory, that is, memory for events that have occurred in one's own life, can provide some important clues to this mystery. ■ Between ages three and four, children begin to give fairly lengthy and cohesive descriptions of events in their past. What factors are responsible for this developmental turning point?

Perhaps the explanation goes back to some ideas raised by influential Swiss psychologist Jean Piaget—namely, that children under age two years represent events in a qualitatively different form than older children do. According to this line of thought, the verbal abilities that blossom in the two year old allow events to be coded in a form radically different from the action-based codes of the infant. Verbal abilities of one year olds are, in fact, related to their memories for events one year later. When researchers had one year olds imitate an action sequence one year after they first saw it, there was correlation between the children's verbal skills at the time they first saw the event and their success on the later memory task. However, even children with low verbal skills showed evidence of remembering the event; thus, memories may be facilitated by but are not dependent on those verbal skills.

Another suggestion is that before children can talk about past events in their lives, they need to have a **reasonable** understanding of the self as a psychological entity. The development of an understanding of the self becomes evident between the first and second years of life and shows rapid **elaboration** in subsequent years. The realization that the physical self has continuity in time, according to this hypothesis, lays the foundation for the emergence of autobiographical memory.

A third possibility is that children will not be able to tell their own "life story" until they understand something about the general form stories take, that is, the structure of narratives. Knowledge about narratives arises from social interactions, particularly the storytelling that children experience from parents and the attempts parents make to talk with children about past events in their lives. When parents talk with children about "what we did today" or "last week" or "last year," they guide the children's formation of a framework for talking about the past. They also provide children with reminders about the memory and relay the message that memories are valued as part of the cultural experience. It is interesting to note that some studies show Caucasian American children have earlier childhood memories than Korean children do. Furthermore, other studies show that Caucasian American mother-child pairs talk about past events three times more often than do Korean mother-child pairs. Thus, the types of social experiences children have do factor into the development of autobiographical memories.

A final suggestion is that children must begin to develop a "**theory of mind**"—an awareness of the concept of mental states (feelings, desires, beliefs, and thoughts), their own and those of others—before they can talk about their own past memories. Once children become capable of answering such questions as "What does it mean to remember?" and "What does it mean to know something?" improvements in memory seem to occur.

It may be that the developments just described are intertwined with and influence one another. Talking with parents about the past may enhance the development of the self-concept, for example, as well as help the child understand what it means to "remember." No doubt the ability to talk about one's past represents memory of a different level of complexity than simple recognition or recall.

1. The word “ample” in the passage is closest in meaning to
  - (A) surprising
  - (B) convincing
  - (C) plentiful
  - (D) questionable
2. According to paragraph 1, infantile amnesia has intrigued psychologists because
  - (A) the ability to recount memories prior to three years of age seems to be connected to intelligence in adulthood
  - (B) psychologists do not understand why some people are able to recount memories from before the age of three years, while others are not able to do so
  - (C) psychologists do not understand the connection between infantile amnesia and autobiographical memory
  - (D) although psychologists have evidence that infants have memory abilities, most people cannot remember life events that happened before the age of three years
3. According to paragraph 1, what is the evidence that a child has developed autobiographical memory?
  - (A) The child is able to remember past events from before the age of three years.
  - (B) The child is able to describe past events in a sufficiently lengthy and cohesive manner.
  - (C) The child is aware that he or she does not remember experiences from before the age of three years.
  - (D) The child is able to give a basic description of the nature of autobiographical memory.
4. In paragraph 2, why does the author provide the information that children with low verbal skills showed evidence of remembering a past event?
  - (A) To provide evidence that memories do not depend only upon verbal skills
  - (B) To challenge the idea that one year olds are too young to form memories
  - (C) To argue that the memory of one year olds depends only on action-based codes
  - (D) To suggest that Piaget later revised his findings on the correlation between memory and verbal ability
5. The word “reasonable” in the passage is closest in meaning to
  - (A) consistent
  - (B) sufficient
  - (C) apparent
  - (D) deep
6. The word “elaboration” in the passage is closest in meaning to
  - (A) development
  - (B) specialization
  - (C) use
  - (D) transformation
7. According to paragraph 3, what is the relationship between autobiographical memory and the development of an understanding of the self?
  - (A) Autobiographical memory aids in the development of an understanding of the self.
  - (B) Children possess an understanding of the self when they can talk about past events in their lives.
  - (C) The realization that the self continues through time may aid in the onset of autobiographical memory.
  - (D) The development of autobiographical memory helps children gain an understanding of their roles in their social relationships.
8. All of the following are mentioned in paragraph 4 as ways in which parents help their children understand the structure of narratives EXCEPT
  - (A) talking with their children about past events
  - (B) telling stories to their children
  - (C) having their children repeat stories back to them
  - (D) showing their children that they think memories are important
9. According to paragraph 4, the studies of Caucasian American and Korean children suggest which of the following?
  - (A) Autobiographical memories develop similarly across all cultures.

- (B) Parents from different cultures tell their children different kinds of stories about the past.
- (C) Children's pleasure in hearing stories varies from culture to culture.
- (D) The kinds of interactions children have with their parents affect the development of autobiographical memories.

**10. According to paragraph 5, what evidence is there that a "theory of mind" is a factor in the development of autobiographical memory?**

- (A) Even children who are not aware of their mental states are still able to talk about past events.
- (B) Autobiographical memory decreases when a child's feelings and mental state are upset.
- (C) Older children who are unable to achieve awareness of mental states lack autobiographical memory.
- (D) Children's memory of past events grows once children can answer questions about what it means to know and remember.

**11. The organization of the passage can best be described as**

- (A) the presentation of an argument followed by the evidence for and against it
- (B) a description of a phenomenon followed by several possible theories about how it develops
- (C) the definition of a psychological term followed by a history of its usage
- (D) an explanation of a process followed by a discussion of its practical applications

**12. The passage supports which of the following statements about the development of autobiographical memory?**

- (A) It is unlikely that a single factor is responsible for the development of autobiographical memory.
- (B) Jean Piaget was the first psychologist to understand the development of autobiographical memory.
- (C) Understanding the development of autobiographical memory will help psychologists eliminate infant amnesia.
- (D) Understanding what it means to remember is the most important factor in the development of autobiographical memory.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

It is unlikely that this memory will be from the first two years of life.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The ability to construct autobiographical memories—coherent narratives about events from one's past—is probably the joint product of several social and intellectual developments.

**Answer choices**

- (A) Although children are capable of simple recognition and recall very early in life, they do not develop the capacity for autobiographical memory until the age of three or four years.
- (B) Verbal skills and familiarity with narrative structures probably aid in the construction of autobiographical memories.
- (C) Children's earliest autobiographical memories are usually about social interactions with parents.
- (D) Research suggests that infantile amnesia occurs in some cultures but not in others and may be linked to children's social experiences.
- (E) The development of autobiographical memory allows children to appreciate the fact that memories are an important part of their cultural experience.
- (F) Children who have acquired a concept of the self and of various mental states are generally able to talk about their own past memories.

### 参考答案与解析

1. 选 **C**。ample 大量的，答案是 C 的 plentiful。
2. 选 **D**。以 intrigue psychologists 做关键词定位至第三句，说为什么会发生婴儿期健忘症这个问题已经困扰了人们很久，特别是考虑到存在孩子有了些记忆这一证据的存在，也就是说没法解释为什么有证据还 infantile amnesia，所以正确答案是 D。A 的 intelligence in adulthood，B 的 others are not able to 和 C 的 autobiographical memory 原文都没说。
3. 选 **B**。以 developed autobiographical memory 做关键词定位至倒数第二句和倒数第三句，说三四岁的时候，孩子能给出过去事情的 lengthy and cohesive description，这是个 developmental turning point，所以答案是 B。A 说 remember，C 说孩子知道 blabla，D 描述的东西都不对。
4. 选 **A**。修辞目的题，先读例子所在句，说语言能力不行的孩子也能记住东西，因此语言能力能帮忙形成 autobiographical memory 而不是决定其形成，所以答案是 A，不仅依靠 verbal，B 和 C 的 one year olds，D 的人名原文都没说，都不选。
5. 选 **B**。reasonable 合理的，答案是 sufficient。
6. 选 **A**。elaboration 详细阐述、精致，所以答案是 A 的 development，表使展开之意。
7. 选 **C**。问两者的关系，找 understanding of the self 和 autobiographical memory 双关键词定位至最后一句，说自我认识为 autobiographical memory 的发生打下基础，所以答案是 C，onset 开端，A 和 B 都没说到两者的关系，D 说反了。
8. 选 **C**。EXCEPT 题，排除法。A 的 past events 和 B 的 telling stories 做关键词都定位至第二句，说父母在 storytelling 和讲过去的事的过程中向孩子传授了知识，所以 A 和 B 都是对的，不选；C 选项原文没说，错，选；D 选项不好找，通过 memories are important 定位至第四句，memories are valued as part of the cultural experience，D 正确，不选。
9. 选 **D**。修辞目的题，问题问到的例子在本段倒数第二和第三句，整个句子都是例子，所以按常理应该向前看，但前一句说父母告诉孩子 memories 很重要，不是中心，本段第一句也没有答案支持，所以应该向后看，而且最后一句的 thus 摆明了就是个中心，所以答案是 D，注意 factor 的名词动用，B 和 C 相似都不对，A 太绝对。
10. 选 **D**。以引号引用的部分做关键词定位至本段第一句，但是这句话除了把题目重复一遍之外什么都没讲，而且这段只有两句话，快速看完第二句，原文说一旦孩子能回答这样的问题，memories 就开始发展了，所以答案是 D。A 与第一句说反；B 的 decrease 和 C 的 lack 原文都没说。
11. 选 **B**。问全文，看各段开头，第一段提出问题，第二段到第五段提出了四种可能的原因，第六段说几种原因可能是相互交错的，只有 B 提到了 several possible theories，所以答案是 B。
12. 选 **A**。问全文，看各段开头，但其实这道题已经不用看开头了，接着上题做就可以，因为上题已经说了 several possible theories，所以答案明显是 A，不可能是单一因素。B 的 JP 是第一个 psychologist；C 的 eliminate 和 D 的 most important factor 原文都没说。
13. 选 **A**。两个过渡点，代词词组 this memory 和 first two years of life，注意是 this memory，所以复数不行，所以 A，C 和 D 有可能是答案，但 C 是 memory capabilities，跟过渡点不重叠，排除；D 没有年纪相关的词，而 A 有 how old were you，所以正确答案是 A。
14. 选 **ABF**。A 选项对应原文第一段，正确；B 选项在原文第二段，正确；C 选项错，earliest 原文没说，即使说对，也是第四段的一个细节，不选；D 选项里的 occurs in some cultures but not in others 原文没有提及，不选；E 选项与原文第四段第四句说反，原文说 memories important 是 parents 告诉孩子的，不是 memories 的发展让他们认识到的，错，不选；F 选项对应原文第三段和第五段的首句，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Spartina**

*Spartina alterniflora*, known as cordgrass, is a deciduous, perennial flowering plant native to the Atlantic coast and the Gulf Coast of the United States. It is the dominant native species of the lower salt marshes along these coasts, where it grows in the intertidal zone (the area covered by water some parts of the day and exposed others).

These natural salt marshes are among the most productive habitats in the marine environment. Nutrient-rich water is brought to the wetlands during each high tide, making a high rate of food production possible. As the seaweed and marsh grass leaves die, bacteria break down the plant material, and insects, small shrimplike organisms, fiddler crabs, and marsh snails eat the decaying plant tissue, digest it, and excrete wastes high in nutrients. **Numerous insects occupy the marsh, feeding on living or dead cordgrass tissue, and redwing blackbirds, sparrows, rodents, rabbits, and deer feed directly on the cordgrass.** Each tidal cycle carries plant material into the offshore water to be used by the subtidal organisms.

*Spartina* is an **exceedingly** competitive plant. ■ It spreads primarily by underground stems; colonies form when pieces of the root system or whole plants float into an area and take root or when seeds float into a suitable area and germinate. ■ *Spartina* establishes itself on substrates ranging from sand and silt to gravel and cobble and is tolerant of salinities ranging from that of near freshwater (0.05 percent) to that of salt water (3.5 percent). ■ Because they lack oxygen, marsh sediments are high in sulfides that are toxic to most plants. ■ *Spartina* has the ability to take up sulfides and convert them to sulfate, a form of sulfur that the plant can use; this ability makes it easier for the grass to colonize marsh environments. Another adaptive advantage is *Spartina*'s ability to use carbon dioxide more efficiently than most other plants.

These characteristics make *Spartina* a valuable component of the estuaries where it occurs naturally. The plant functions as a stabilizer and a sediment trap and as a nursery area for estuarine fish and shellfish. Once established, a stand of *Spartina* begins to trap sediment, changing the substrate elevation, and eventually the stand evolves into a high marsh system where *Spartina* is gradually displaced by higher-elevation, brackish-water species. As elevation increases, narrow, deep channels of water form throughout the marsh. Along the east coast *Spartina* is considered valuable for its ability to prevent erosion and marshland deterioration; it is also used for coastal restoration projects and the creation of new wetland sites.

*Spartina* was transported to Washington State in packing materials for oysters transplanted from the east coast in 1894. Leaving its insect predators behind, the cordgrass has been spreading slowly and steadily along Washington's tidal estuaries on the west coast, crowding out the native plants and drastically altering the landscape by trapping sediment. *Spartina* **modifies** tidal mudflats, turning them into high marshes inhospitable to the many fish and waterfowl that depend on the mudflats. It is already hampering the oyster harvest and the Dungeness crab fishery, and it interferes with the recreational use of beaches and waterfronts. *Spartina* has been transplanted to England and to New Zealand for land reclamation and shoreline stabilization. In New Zealand the plant has spread rapidly, changing mudflats with marshy fringes to extensive salt meadows and reducing the number and kinds of birds and animals that use the marsh.

**Efforts** to control *Spartina* outside its natural environment have included burning, flooding, shading plants with black canvas or plastic, smothering the plants with dredged materials or clay, applying herbicide, and mowing repeatedly. Little success has been reported in New Zealand and England; Washington State's management program has tried many of these methods and is presently using the herbicide glyphosphate to control its spread. Work has begun to determine the feasibility of using insects as biological controls, but effective biological controls are considered years away. Even with a massive effort, it is doubtful that complete eradication of *Spartina* from nonnative habitats is possible, for it has become an integral part of these shorelines and estuaries during the last 100 to 200 years.

1. **According to paragraph 1, each of the following is true of *Spartina alterniflora* EXCEPT**
  - (A) It rarely flowers in salt marshes.
  - (B) It grows well in intertidal zones.
  - (C) It is commonly referred to as cordgrass.
  - (D) It occurs naturally along the Gulf Coast and the Atlantic coast of the United States.
2. **According to paragraph 2, a major reason why natural salt marshes are so productive is that they are**
  - (A) inhabited by long-lived seaweed and marsh grasses that reproduce gradually
  - (B) kept clear of excess plant material by the tides
  - (C) regularly supplied with high levels of nutrients
  - (D) home to a wide variety of different species of grasses
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Insects feed only on dead cordgrass, while most other marsh inhabitants feed on live cordgrass.
  - (B) The marsh is a good habitat for insects, but a relatively poor one for birds and animals.
  - (C) Although cordgrass provides food for birds and animals, it gives insects both food and a place to live.
  - (D) Cordgrass provides food for numerous insects, birds, and other animals.
4. **What is the organizational structure of paragraph 3?**
  - (A) It makes a general claim about *Spartina* and then provides specific evidence to defend that claim against objections to the claim.
  - (B) It presents a general characterization of *Spartina* and then describes particular features on which this characterization is based.
  - (C) It reports a widely held view about *Spartina* and then considers evidence both for and against that view.
  - (D) It presents a general hypothesis about *Spartina* and then lists specific evidence that disputes that hypothesis.
5. **The word “exceedingly” in the passage is closest in meaning to**
  - (A) unusually
  - (B) dangerously
  - (C) surprisingly
  - (D) highly
6. **According to paragraph 3, one reason that *Spartina* is able to compete in marsh environments so successfully is its ability to**
  - (A) alter the substrate in which it grows
  - (B) convert sulfides into a usable form of sulfur
  - (C) grow and produce seeds while floating on the surface of the water
  - (D) produce carbon dioxide with great efficiency
7. **Paragraph 4 suggests that where *Spartina* occurs naturally, an established stand of it will eventually**
  - (A) create conditions in which it can no longer survive
  - (B) get washed away by water flowing through the deep channels that form around it
  - (C) become adapted to brackish water
  - (D) take over other grass species growing in the area
8. **According to paragraph 4, in its natural habitats, *Spartina* helps estuaries by**
  - (A) controlling marshland decline
  - (B) decreasing the substrate elevation
  - (C) reducing the brackishness of the water
  - (D) increasing the flow of water into the estuary
9. **According to paragraph 5, *Spartina* negatively affects wildlife in estuaries by**
  - (A) trapping fish and waterfowl in sediment
  - (B) preventing oysters from transplanting successfully
  - (C) turning mudflats into high marshes and salt meadows

(D) expanding the marshy fringes of salt meadows

**10. The word “modifies” in the passage is closest in meaning to**

- (A) creates
- (B) changes
- (C) grows on
- (D) breaks down

**11. According to paragraph 6, each of the following methods has been used in attempts to control Spartina EXCEPT**

- (A) flooding plants
- (B) cutting plants down repeatedly
- (C) applying herbicides
- (D) introducing predatory insects

**12. The word “Efforts” in the passage is closest in meaning to**

- (A) Laws
- (B) Suggestions
- (C) Attempts
- (D) Failures

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Spartina is particularly able to tolerate high salinities because salt glands on the surface of the leaves remove the salt from the plant sap.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Spartina alterniflora, or cordgrass, is the dominant native species in salt marshes along the Atlantic coast and the Gulf Coast of the United States.

**Answer choices**

- (A) Spartina is very well adapted to conditions in salt marshes, where it plays a valuable role in stabilizing them and making them highly productive marine habitats.
- (B) Spartina expands by growing root systems that float on the water’s surface and descend underground, where it finds the nutrients that it needs to germinate.
- (C) As a result of its spread in Washington State over the past hundred years, Spartina has now become a threat to native oysters by releasing sediments that contain sulfides into the waters.
- (D) The dead leaves of Spartina become food for a wide variety of marine organisms.
- (E) Outside its native regions, Spartina can pose serious problems by turning mudflats into high marshes that are inhospitable to many native fish and birds.
- (F) Spartina has physiological adaptations that allow it to grow in environments where other plants cannot, making it a very strong competitor that is difficult to control once it is established.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **A**。EXCEPT 题，排除法。A 的 salt marshes 做关键词定位至第二句，但这句没说是否开花的信息，第一句说 spartina 是 perennial flowering plant，而 A 说不开花，所以 A 说反，选；B 的 intertidal zone 做关键词同样定位至第二句，正确，不选；C 的 cordgrass 做关键词定位至首句，说 spartina 也叫 cordgrass，正确，不选；D 的一系列专有名词做关键词定位至首句，正确，不选。
2. 选 **C**。以 salt marshes are so productive 做关键词定位至第二句，说 nutrient-rich 富营养的水被潮水带到 marsh，导致生产率很高，所以正确答案是 C。其他答案都没说 if。
3. 选 **D**。原文的结构是 insects 和一大堆乱七八糟的动物都吃 cordgrass，所以正确答案是 D。A 的 only dead cordgrass 与原文相反；B 的 habitat 和 C 的 a place to live 都没说。
4. 选 **B**。问整段的结构，先看开头，再看第二句和最后一句。第一句说 S 是一个非常 competitive 的植物，第二句说这种植物怎么生长的，最后一句说另外一个 adaptive 的优势是能够利用二氧化碳，整个都在说 spartina 到底是怎么长的，从来没说过反对，所以 A 的 objection，C 的 against 和 D 的 dispute 都不对，正确答案是 B。
5. 选 **D**。exceedingly 非常，所以答案是 highly。
6. 选 **B**。以 marsh environments 做关键词定位至倒数第二句，说 spartina 能够吸收 sulfide 并将其转化为 sulfate，这一能力使 spartina 能够占领 marsh environments，所以正确答案是 B，A 的改变 substrate，C 的 floating on the surface 和 D 的 produce carbon dioxide 都没讲到。
7. 选 **A**。以 established stand 做关键词定位至第三句，说一旦 establish，spartina 会做 blabla 事情，stand 变成 high marsh system，spartina 会被替代，所以正确答案是 A 的 no longer survive。B 的 get washed，C 的 adapt 和 D 的 take over 都没说。
8. 选 **A**。整段都在说 spartina 如何帮忙 estuary 的，所以单纯从问题中找关键词不行，使用排除法。A 的 marshland 定位至最后一句，说 spartina 能阻止 erosion 和 marshland deterioration，与 A 的 decline 是同义替换，正确；B 的 substrate elevation，C 的 reduce brackishness 和 D 的 increase the flow of water 原文都没说。
9. 选 **C**。问给生物带来了什么不好的影响，文中说 spartina 把 tidal mudflat 升高，使得环境变得对那些那些依靠 mudflat 的 fish 和 waterfowl 不利，所以答案是 C。A 错，原文说 trapping sediment，不是 fish and waterfowl；B 的 transport 错，原文说的是阻止 harvest；原文说把 marshy fringe 变成 salt meadow，不是 D 的 expand，D 错。
10. 选 **B**。modify 改变，所以正确答案是 B。
11. 选 **D**。EXCEPT 题，排除法。A 的 flooding 和 B 的 cutting repeatedly 做关键词都定位至第一句，A 和 B 都正确，不选；C 的 herbicide 做关键词定位至第二句，正确，不选；D 的 insects 做关键词定位至第三句，但原文说的是昆虫的 feasibility 尚未决定，所以 D 错，选。
12. 选 **C**。effort 努力，所以 C 的 attempt 正确。
13. 选 **C**。两个过渡点，分别是名词 high salinities 和连词 because，以 high salinities 做关键词可以确定答案是 B 或者 C，但按照正常的叙述方式，先说现象后说原因，所以应该先说能够在高盐度环境下生存，再说原因，所以根据 because 确定正确答案是 C。
14. 选 **AEF**。A 选项对应原文第二段首句，正确；B 选项是第三段的一个细节，不选；C 选项原文没说，不选；D 选项是第二段提到的细节，不选；E 选项对应原文第五段第三句，正确，注意此段首句不是中心句，而且首句和第二句都在讲一个例子，所以都不看；F 选项对应第三段和最后一段首句，正确。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## The Birth of Photography

Perceptions of the visible world were greatly altered by the invention of photography in the middle of the nineteenth century. In particular, and quite logically, the art of painting was forever changed, though not always in the ways one might have expected. The realistic and naturalistic painters of the mid- and late-nineteenth century were all intently aware of photography—as a thing to use, to learn from, and react to.

Unlike most major inventions, photography had been long and impatiently awaited. The images produced by the camera obscura, a boxlike device that used a pinhole or lens to throw an image onto a ground-glass screen or a piece of white paper, were already familiar—the device had been much employed by topographical artists like the Italian painter Canaletto in his detailed views of the city of Venice. What was lacking was a way of giving such images permanent form. This was finally achieved by Louis Daguerre (1787–1851), who perfected a way of fixing them on a silvered copper plate. His discovery, the “daguerreotype,” was announced in 1839. ■

A second and very different process was patented by the British inventor William Henry Talbot (1800–1877) in 1841. ■ Talbot’s “calotype” was the first negative-to-positive process and the direct ancestor of the modern photograph. The calotype was revolutionary in its use of chemically treated paper in which areas hit by light became dark in tone, producing a negative image. ■ This “negative,” as Talbot called it, could then be used to print multiple positive images on another piece of treated paper. ■

The two processes produced very different results. The daguerreotype was a unique image that reproduced what was in front of the camera lens in minute, unselective detail and could not be duplicated. The calotype could be made in series, and was thus the equivalent of an etching or an engraving. Its general effect was soft edged and tonal.

One of the things that most impressed the original audience for photography was the idea of authenticity. Nature now seemed able to speak for itself, with a minimum of interference. The title Talbot chose for his book, *The Pencil of Nature* (the first part of which was published in 1844), reflected this feeling. Artists were fascinated by photography because it offered a way of examining the world in much greater detail. They were also afraid of it, because it seemed likely to make their own efforts unnecessary.

Photography did indeed make certain kinds of painting obsolete—the daguerreotype virtually did away with the portrait miniature. It also made the whole business of making and owning images democratic. Portraiture, once a luxury for the privileged few, was suddenly well within the reach of many more people.

In the long term, photography’s impact on the visual arts was far from simple. **Because the medium was so prolific, in the sense that it was possible to produce a multitude of images very cheaply, it was soon treated as the poor relation of fine art, rather than its destined successor.** Even those artists who were most dependent on photography became reluctant to admit that they made use of it, in case this compromised their professional standing.

The rapid technical development of photography—the introduction of lighter and simpler equipment, and of new emulsions that coated photographic plates, film, and paper and enabled images to be made at much faster speeds—had some unanticipated consequences. Scientific experiments made by photographers such as Eadweard Muybridge (1830–1904) and Etienne-Jules Marey (1830–1904) demonstrated that the movements of both humans and animals differed widely from the way they had been traditionally represented in art. Artists, often reluctantly, were forced to accept the evidence provided by the camera. The new candid photography—unposed pictures that were made when the subjects were unaware that their pictures were being taken—confirmed these scientific results, and at the same time, thanks to the radical cropping (trimming) of images that the camera often imposed, suggested new compositional formats. The accidental effects obtained by candid photographers were soon being copied by artists such as the French painter Degas.

1. **What can be inferred from paragraphs 1 and 2 about the effect of photography on nineteenth-century painting?**
  - (A) Photography did not significantly change the way people looked at reality.
  - (B) Most painters used the images of the camera obscura in preference to those of the daguerreotype.
  - (C) Painters who were concerned with realistic or naturalistic representation were particularly influenced by photography.
  - (D) Artists used the long-awaited invention of photography in just the ways they had expected to.
2. **According to paragraphs 2 and 3 which of the following did the daguerreotype and the calotype have in common?**
  - (A) They were equally useful for artists.
  - (B) They could be reproduced.
  - (C) They produced a permanent image.
  - (D) They were produced on treated paper.
3. **The word “duplicated” in the passage is closest in meaning to**
  - (A) copied
  - (B) replaced
  - (C) handled
  - (D) clarified
4. **The phrase “Its general effect” in the passage refers to**
  - (A) the camera lens
  - (B) the calotype
  - (C) the etching
  - (D) the engraving
5. **The word “authenticity” in the passage is closest in meaning to**
  - (A) improvement
  - (B) practicality
  - (C) genuineness
  - (D) repetition
6. **What point does the author make in paragraph 6?**
  - (A) Paintings became less expensive because of competition with photography.
  - (B) Photography, unlike painting, was a type of portraiture that even ordinary people could afford.
  - (C) Every style of painting was influenced by the invention of photography.
  - (D) The daguerreotype was more popular than the calotype.
7. **The word “reluctant” in the passage is closest in meaning to**
  - (A) unable
  - (B) embarrassed
  - (C) unlikely
  - (D) unwilling
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Photography did not replace other fine arts because people felt the image looked cheap in relation to the other arts.
  - (B) Photography was not considered a true art because people could use it to create many images cheaply.
  - (C) Photography was so cheap and readily available that it could be purchased by people who were too poor to purchase fine art.
  - (D) Photography not only spread quickly but also was a cheap art form and so became true successor of fine arts rather than its poor relation.
9. **The word “unanticipated” in the passage is closest in meaning to**
  - (A) indirect
  - (B) not expected

- (C) unquestionable
- (D) beneficial

**10. The word “accidental” in the passage is closest in meaning to**

- (A) surprising
- (B) unintentional
- (C) realistic
- (D) unusual

**11. Which of the following is mentioned in paragraph 8 as a benefit that artists derived from photography?**

- (A) It inspired artists to use technological themes in their painting.
- (B) It lent prestige to those artists who used photographs as models for paintings.
- (C) It provided artists with new types of equipment to speed up the painting process.
- (D) It motivated artists to think about new ways to compose images in their paintings.

**12. It can be inferred from paragraph 8 that one effect that photography had on painting was that it**

- (A) provided painters with new insights into how humans and animals actually move
- (B) showed that representing movement could be as interesting as portrait art
- (C) increased the appeal of painted portraiture among the wealthy
- (D) influenced artists to improve techniques for painting faster

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Although his process produced permanent images, each was unique and no reproduction of the picture was possible.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The invention of photography had a significant impact on the art of painting in the nineteenth century.

**Answer choices**

- (A) For a brief time, artists preferred not to paint natural or realistic images that would have to compete with photographs.
- (B) Before photography, Canaletto had used the camera obscura to project scenes onto a paper or glass plate.
- (C) The photographic processes of Louis Daguerre and William Henry Talbot both made permanent images, but only Talbot’s process allowed making multiple copies.
- (D) The work of Eadweard Muybridge and Etienne-Jules Marey established photography both as a science and as an art.
- (E) Photography made accurate images widely and inexpensively available, but this popular success also had the effect of lowering its perceived value in relation to the fine arts.
- (F) Photography eliminated the painted portrait miniature, led artists to accurately represent movement, and affected pictorial composition, but did not replace traditional visual arts.

### 参考答案与解析

1. 选 **C**。以 nineteenth-century 做关键词定位至第一段最后一句，说十九世纪中晚期的 painter 都非常专注于 photography，去使用，去学习，去回应，所以正确答案是 C，受影响。A 选项与第一段首句说反，不选；B 选项的比较原文没说，也没法推断，错；D 完全没提到任何相关信息，不选。
2. 选 **C**。由于内容较多，此题用排除法较好。A 的 equally useful 原文完全没说，错；B 的 reproduce 是错的，根据第二题，Dague 是不能复制的；C 正确，根据第二段的倒数第三句，说当时缺乏的是 permanent form，后来这个问题被 Louis D 的发明 Dague 解决了，所以 Dague 是 permanent form，至于 Calo，第三段第二句都说了是现代摄影的始祖，当然是 permanent form，所以 C 选项正确。D 的那个 paper 是至于 calo 采用的，dague 不用，D 错。
3. 选 **A**。duplicate 复制，所以答案是 A 的 copy。
4. 选 **B**。指代题，指的是前句主语，所以正确答案是 B，选项 C 与选项 D 并列，都不选；A 不靠谱。
5. 选 **C**。authenticity 真实性，所以正确答案是 C 的 genuineness。
6. 选 **B**。此段很短，快速扫完，说了两个点，一是使某些 painting 被遗弃，二是使 making and owning images 大众化，所以正确答案是 B，即使普通大众也用得起。A 的 competition 原文没说；C 的 every style 原文没说，而且也太绝对；D 的比较原文没说。
7. 选 **D**。reluctant 不情愿的，所以是 unwilling。
8. 选 **B**。原句是因果关系，所以 D 的转折错；将两个逗号之间的句子去掉之后，该句结构变得明朗起来，因是 medium was so prolific，果是 treated as poor relation of fine art，所以正确答案是 B。A 的果中的 replace 原文没说，错；C 的 that 之后的结果原文没说，错。
9. 选 **B**。accidental 意外的，答案 unintentional。
10. 选 **B**。unanticipated 没料到的，意外的，所以正确答案是 B 的 not expected。
11. 选 **D**。以 artist 做关键词定位至后半段，说 artist 不得不接受 camera 提供的事实，新技术 confirm 这些事实，有了 new compositional formats，所以正确答案是 D，使用新的方法 compose 他们的 painting。A 的 technological theme，B 的 prestige 和 C 的 speed up 原文均没提到，都不选。
12. 选 **A**。问有什么影响，这段首句说有影响，但没说什么影响，所以往下看。第二句说人和动物移动的方式与传统认为的不同，所以正确答案是 A。B 的比较，C 的 wealthy 有钱人和 D 的 painting faster 原文不但没说，而且没有任何相关信息说到，所以都不选。
13. 选 **A**。一个过渡点就够了，名词 permanent image，只有 A 之前有 permanent form，所以正确答案是 A。而且后面一段说 calo 可以复制，那前一段自然就应该说 dague 不能复制了，所以这个连词也是一个过渡点。
14. 选 **CEF**。For 选项原文没说，不选；Before 选项是原文第二段提到的一个细节，不选；The photographic 选项对应原文第二段和第三段，正确；The work 选项是第八段提到的一个细节，不选；Photography made 选项对应原文第七段，正确；Photography eliminated 选项对应原文第六、七、八三段，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**The Allende Meteorite**

Sometime after midnight on February 8, 1969, a large, bright meteor entered Earth's atmosphere and broke into thousands of pieces, plummeted to the ground, and scattered over an area 50 miles long and 10 miles wide in the state of Chihuahua in Mexico. The first meteorite from this fall was found in the village of Pueblito de Allende. Altogether, roughly two tons of meteorite fragments were recovered, all of which bear the name Allende for the location of the first discovery.

Individual specimens of Allende are covered with a black, glassy crust that formed when their exteriors melted as they were slowed by Earth's atmosphere. **When broken open, Allende stones are revealed to contain an assortment of small, distinctive objects, spherical or irregular in shape and embedded in a dark gray matrix (binding material), which were once constituents of the solar nebula—the interstellar cloud of gas and dust out of which our solar system was formed.**

The Allende meteorite is classified as a chondrite. Chondrites take their name from the Greek word *chondros*—meaning “seed”—an allusion to their appearance as rocks containing tiny seeds. These seeds are actually chondrules: millimeter-sized melted droplets of silicate material that were cooled into spheres of glass and crystal. A few chondrules contain grains that survived the melting event, so these enigmatic chondrules must have formed when compact masses of nebular dust were fused at high temperatures—approaching 1,700 degrees Celsius—and then cooled before these surviving grains could melt. Study of the textures of chondrules confirms that they cooled rather quickly, in times measured in minutes or hours, so the heating events that formed them must have been localized. It seems very unlikely that large portions of the nebula were heated to such extreme temperatures, and huge nebula areas could not possibly have lost heat so fast. Chondrules must have been melted in small pockets of the nebula that were able to lose heat rapidly. The origin of these peculiar glassy spheres remains an enigma.

Equally perplexing constituents of Allende are the refractory inclusions: irregular white masses that tend to be larger than chondrules. ■ They are composed of minerals uncommon on Earth, all rich in calcium, aluminum, and titanium, the most refractory (resistant to melting) of the major elements in the nebula. ■ The same minerals that occur in refractory inclusions are believed to be the earliest-formed substances to have condensed out of the solar nebula. ■ However, studies of the textures of inclusions reveal that the order in which the minerals appeared in the inclusions varies from inclusion to inclusion, and often does not match the theoretical condensation sequence for those metals. ■

Chondrules and inclusions in Allende are held together by the chondrite matrix, a mixture of fine-grained, mostly silicate minerals that also includes grains of iron metal and iron sulfide. At one time it was thought that these matrix grains might be pristine nebular dust, the sort of stuff from which chondrules and inclusions were made. However, detailed studies of the chondrite matrix suggest that much of it, too, has been formed by condensation or melting in the nebula, although minute amounts of surviving interstellar dust are mixed with the processed materials.

All these diverse constituents are aggregated together to form chondritic meteorites, like Allende, that have chemical compositions much like that of the Sun. To compare the compositions of a meteorite and the Sun, it is necessary that we use ratios of elements rather than simply the abundances of atoms. After all, the Sun has many more atoms of any element, say iron, than does a meteorite specimen, but the ratios of iron to silicon in the two kinds of matter might be comparable. The compositional similarity is striking. The major difference is that Allende is depleted in the most volatile elements, like hydrogen, carbon, oxygen, nitrogen, and the noble gases, relative to the Sun. These are the elements that tend to form gases even at very low temperatures. We might think of chondrites as samples of distilled Sun, a sort of solar sludge from which only gases have been removed. Since practically all the solar system's mass resides in the Sun, this similarity in chemistry means that chondrites have average solar system composition, except for the most volatile elements; they are truly lumps of nebular matter, probably similar in composition to the matter from which planets were assembled.

1. The word **"location"** in the passage is closest in meaning to
  - (A) sight
  - (B) sake
  - (C) success
  - (D) place
2. Which of the following can be inferred from paragraph 1 about the large meteor that entered Earth's atmosphere on February 8, 1969?
  - (A) It was almost ten miles wide.
  - (B) It was the biggest meteor ever to hit Mexico.
  - (C) It weighed more than two tons.
  - (D) It broke into more pieces than most meteors do.
3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Allende meteorites were formed when constituents of the interstellar cloud of gas and dust got trapped inside small, roughly spherical objects and these objects became bound together in a dark gray matrix.
  - (B) Inside Allende meteorites is a dark gray matrix that binds together small spherical or irregular objects formed from the interstellar cloud of gas and dust out of which the solar system was made.
  - (C) By breaking open Allende meteorites, scientists were able to find out what the solar nebula was made of.
  - (D) Allende meteorites were filled with material formed almost entirely from interstellar gas and dust.
4. The word **"allusion"** in the passage is closest in meaning to
  - (A) addition
  - (B) modification
  - (C) resemblance
  - (D) reference
5. The word **"enigmatic"** in the passage is closest in meaning to
  - (A) dangerous
  - (B) mysterious
  - (C) interesting
  - (D) surprising
6. According to paragraph 3, what does the presence of grains inside some of the chondrules indicate?
  - (A) The chondrules were formed of silicate material.
  - (B) The chondrules were formed at high temperatures and then cooled rapidly.
  - (C) The grains were formed in huge areas of the solar nebula.
  - (D) The grains were formed after the chondrules were fused together into chondrites.
7. According to paragraph 4, all of the following are true about the minerals found in the refractory inclusions EXCEPT
  - (A) These minerals are among the most resistant to melting of all the major elements in the solar nebula.
  - (B) These minerals are believed to be some of the first elements to have condensed out of the solar nebula.
  - (C) These minerals are among the least commonly found elements on Earth.
  - (D) These elements occur in the order that scientists would have predicted.
8. The word **"pristine"** in the passage is closest in meaning to
  - (A) pure
  - (B) solid
  - (C) ordinary
  - (D) trapped
9. According to paragraph 5, which of the following is indicated by studies of the mixture holding the inclusions together?
  - (A) Large amounts of this material were formed by condensation or melting in the nebula.

- (B) This material contains more iron and iron sulfide than had previously been thought.
- (C) This material is very similar to the material from which the refractory inclusions are made.
- (D) The grains in this material are made from the same elements as chondrules are.

**10. In paragraph 6, why does the author mention that “the Sun has many more atoms of any element, say iron, than does a meteorite specimen”?**

- (A) To show how difficult it is to compare the composition of a meteorite with that of the Sun
- (B) To explain why a comparison of the compositions of a meteorite and of the Sun has to be done in terms of ratios of elements
- (C) To identify the most common element in both the Sun and meteorite specimens
- (D) To emphasize how much larger the Sun is than any meteorite specimen is

**11. According to paragraph 6, the composition of chondritic meteorites differs from the composition of the Sun primarily in**

- (A) containing nebular matter
- (B) containing many fewer atoms of iron
- (C) the relative amount of volatile elements
- (D) the ratio of iron to silicon

**12. According to paragraph 6, what is the significance of the similarity in composition between chondrites and the Sun?**

- (A) It indicates what the matter from which planets were formed was probably like.
- (B) It may explain how the Sun originally developed.
- (C) It helps scientists estimate the variations in the chemical composition of different meteors.
- (D) It suggests that most meteorites may contain large quantities of volatile elements.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

It is therefore still unclear if all inclusions were formed in the same way.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Studies of the Allende meteorite provided information about the composition of chondritic meteorites and their possible origin.

**Answer choices**

- (A) When Allende entered Earth’s atmosphere, it broke into thousands of pieces called chondrites because they look like glassy, black seeds.
- (B) The mineral content of chondrules suggests that they were probably formed in isolated regions of the nebula that remained much hotter than the rest.
- (C) Chondrules are tiny, millimeter-sized drops of silicate materials that probably formed when lumps of nebular dust were fused at extremely high temperatures and then quickly cooled.
- (D) Irregularly shaped inclusions in Allende are composed of minerals that are resistant to melting and are believed to be the earliest minerals to have condensed out of the nebula.
- (E) The matrix that holds the chondrules and inclusions together in Allende consists mainly of grains of nebular dust that were trapped inside the meteor before they could be melted.
- (F) Except for being depleted in volatile elements, chondritic meteorites are probably very similar in composition to the matter from which planets were assembled.

### 参考答案与解析

1. 选 **D**。location 位置，所以正确答案是 D。
2. 选 **C**。以时间做关键词定位至第一句，说一个 meteor 碎成了很多碎片落在了长多少宽多少的区域内。A 错，不是那个 meteor ten miles wide，是那个区域；B 的 biggest 没说也没有相关信息可以推断，而且太绝对；C 正确，原文第二句说收集了大致两吨碎片，碎片都有两吨了，那 meteor 自然不止两吨，所以 C 正确；D 的 more pieces 原文没有信息可以推断，不选。
3. 选 **B**。这个句子看上去有点复杂，但把没用部分去掉之后，剩下的东西并不多，只有 when blabla。A 包含各种各样的 objects，后面的一大堆东西都是修饰 objects 的，所以正确答案是 B。A 选项的 A form 原文没说，而且 cloud of gas and dust got trapped 原文也没说；C 和 D 的主干完全错误。
4. 选 **D**。allusion 暗示，所以正确答案是 D。
5. 选 **B**。enigmatic 谜一般的，答案是 B。
6. 选 **B**。以 presence of grains inside some of the chondrules 做关键词定位至第四句，也就是刚才词汇题所在的那句，说 C 包含了 melting 之后剩下的颗粒，这些神奇的颗粒一定是在高温下 nebular dust were fused 的时候形成的，然后快速冷却，所以正确答案是 B。A 说的是对的，但问题问的是 grains indicate 什么，A 答非所问，不选；C 完全没说；D 的 after 错，不选，原文说的是 when，而且 fuse into 什么原文也没说。
7. 选 **D**。EXCEPT 题，排除法。A 的 most resistant to melting 做关键词和 C 的 least commonly found 定位至第二句，正确，都不选；B 的 first elements 做关键词定位至第三句，earliest-formed 与 first 同义替换，正确，不选；D 的 order 做关键词定位至最后一句，说 order varies from inclusion to inclusion，所以 scientist 不能预测，D 说反，选。
8. 选 **A**。pristine 原始的，淳朴的，答案是 pure。
9. 选 **A**。以 mixture holding the inclusions together 做关键词定位至最后一句，说 matrix 是 nebula 里面通过 condensation 和 melting 形成的，所以正确答案是 A。B 的比较没说，不选；C 完全没说；D 的 same material 没说，都不选。
10. 选 **B**。修辞目的题，先看例子所在句，但这句话是一个例子，所以看前一句。前句说为比较陨星和太阳的组分，应该应用的是元素的比值而不是单纯应用元素的丰度，所以正确答案是 B，C 和 D 完全不靠谱，A 的 difficult 原文没说，不选。
11. 选 **C**。以 differ 做关键词定位至第五句，说最主要的区别在于与太阳相比，A 没有挥发性元素，所以正确答案是 C，其他答案都没说。
12. 选 **A**。以 similarity 做关键词定位至第四句和最后一句，但第四句什么都没讲，所以答案在最后一句，说除了 C 没有可挥发性元素之外，其他的成分与太阳系的平均成分相同，是 nebular 的 lump，同行星组分相同，所以正确答案是 A。B 错，原文说的是行星形成，不是太阳；C 的 variation 没说；D 的有挥发性元素不是 similarity 体现的，不选。
13. 选 **D**。两个过渡点，名词 inclusion 和连词 therefore。根据 inclusion 可以确定 A，C 或者 D 是正确的，C 的 however 衔接紧密，被排除；依据 therefore 可以确定正确答案是 D，之前说不同的 inclusion 的成分不同，结果是不能确定 inclusion 是不是以同样方式形成的。
14. 选 **CDF**。A 选项是第二段和第三段提到的细节，不选；B 选项原文没说，不选；C 选项对应原文第三段，正确；D 选项对应原文第四段的开头两句，正确；E 选项说反了，第二段最后一句说 matrix 曾经是 solar nebula 的组成部分，而这个选项说 matrix 是由 solar nebula grain 组成的，所以不选；F 选项对应原文最后一段，正确。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。

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错误：     个

**Urban Climates**

The city is an extraordinary processor of mass and energy and has its own metabolism. A daily input of water, food, and energy of various kinds is matched by an output of sewage, solid waste, air pollutants, energy, and materials that have been transformed in some way. The quantities involved are enormous. Many aspects of this energy use affect the atmosphere of a city, particularly in the production of heat.

In winter the heat produced by a city can equal or surpass the amount of heat available from the Sun. All the heat that warms a building eventually transfers to the surrounding air, a process that is quickest where houses are poorly insulated. But an automobile produces enough heat to warm an average house in winter, and if a house were perfectly insulated, one adult could also produce more than enough heat to warm it. Therefore, even without any industrial production of heat, an urban area tends to be warmer than the countryside that surrounds it.

The burning of fuel, such as by cars, is not the only source of this increased heat. Two other factors contribute to the higher overall temperature in cities. The first is the heat capacity of the materials that constitute the city, which is typically dominated by concrete and asphalt. During the day, heat from the Sun can be conducted into these materials and stored—to be released at night. But in the countryside materials have a significantly lower heat capacity because a vegetative blanket prevents heat from easily flowing into and out of the ground. The second factor is that radiant heat coming into the city from the Sun is trapped in two ways: (1) by a continuing series of reflection among the numerous vertical surfaces that buildings present and (2) by the dust dome, the cloudlike layer of polluted air that most cities produce. Shortwave radiation from the Sun passes through the pollution dome more easily than outgoing longwave radiation does; the latter is absorbed by the gaseous pollutants of the dome and reradiated back to the urban surface.

Cities, then, are warmer than the surrounding rural areas, and together they produce a phenomenon known as the urban heat island. Heat islands develop best under particular conditions associated with light winds, but they can form almost any time. ■ The precise configuration of a heat island depends on several factors. ■ For example, the wind can make a heat island stretch in the direction it blows. ■ When a heat island is well developed, variations can be extreme; in winter, busy streets in cities can be 1.7°C warmer than the side streets. ■ Areas near traffic lights can be similarly warmer than the areas between them because of the effect of cars standing in traffic instead of moving. The maximum differences in temperature between neighboring urban and rural environments is called the heat-island intensity for that region. In general, the larger the city, the greater its heat-island intensity. The actual level of intensity depends on such factors as the physical layout, population density, and productive activities of a metropolis.

The surface-atmosphere relationships inside metropolitan areas produce a number of climatic peculiarities. For one thing, the presence or absence of moisture is affected by the special qualities of the urban surface. With much of the built-up landscape impenetrable by water, even gentle rain runs off almost immediately from rooftops, streets, and parking lots. Thus, city surfaces, as well as the air above them, tend to be drier between episodes of rain; with little water available for the cooling process of evaporation, relative humidities are usually lower. Wind movements are also modified in cities because buildings increase the friction on air flowing around them. This friction tends to slow the speed of winds, making them far less efficient at dispersing pollutants. On the other hand, air turbulence increases because of the effect of skyscrapers on airflow. Rainfall is also increased in cities. The cause appears to be in part greater turbulence in the urban atmosphere as hot air rises from the built-up surface.

1. The word “**enormous**” in the passage is closest in meaning to
  - (A) growing
  - (B) frightening
  - (C) very large
  - (D) strictly controlled
2. The word “**surpass**” in the passage is closest in meaning to
  - (A) remain below
  - (B) be higher than
  - (C) add to
  - (D) come close to
3. According to paragraph 2, how soon heat from a warmed house reaches the outside air greatly affected by
  - (A) how well the house is heated
  - (B) how well the house is insulated
  - (C) how many adults live in the house
  - (D) how much sunshine the house receives
4. According to paragraph 3, each of the following contributes to making urban areas warmer than the surrounding countryside EXCEPT
  - (A) the fuel burned by motor vehicles
  - (B) the capacity to store heat of the materials used in building a city
  - (C) the easy flow of heat into the ground in city areas covered by vegetation
  - (D) the repeated reflection of solar radiation back and forth among buildings
5. According to paragraph 3, why do materials in the countryside have a lower heat capacity than materials in cities do?
  - (A) The countryside in the Sun is the only important source of heat.
  - (B) Construction materials in the city are not as good at keeping buildings warm as they are in the countryside.
  - (C) In the countryside the solar heat that flows into the ground flows out again quickly.
  - (D) Countryside vegetation prevents heat from being trapped in the ground.
6. How is paragraph 3 organized?
  - (A) It describes two factors that contribute to the increased heat of cities and then provides two causes for the second factor.
  - (B) It describes two causes discovered in an early analysis of the increased heat of cities.
  - (C) It describes two factors that contribute to the increased heat of cities and two other factors that work against it.
  - (D) It describes two well-established causes of the increased heat of cities and other two whose roles are less well understood.
7. The word “**configuration**” in the passage is closest in meaning to
  - (A) location
  - (B) history
  - (C) temperature
  - (D) shape
8. According to paragraph 4, what can explain the substantial differences in temperature between one area and other within a well-developed heat island?
  - (A) The overall size of the heat island that includes the two reasons
  - (B) The intensity of the heat island that includes the two areas
  - (C) Differences between the two areas in the general level of activity, including traffic
  - (D) Differences between the two areas in the insulation materials used in construction
9. Paragraph 4 supports the idea that a city’s heat-island intensity would increase if
  - (A) the city went into an economic decline and lost population
  - (B) the city’s economy shifted from heavy industry to health care and education
  - (C) there was an upward trend in the average age of the city’s residents

(D) repair work on the streets slowed traffic throughout the city

**10. According to paragraph 5, surfaces in the city are generally drier than surfaces in the countryside between periods of rainfall because**

- (A) in the city gentle rain is much more common than heavy rain
- (B) high temperatures in the city speed up the process of evaporation
- (C) in the city there are longer periods of dry weather between episodes of rain
- (D) rainwater in the city cannot soak into most surfaces and quickly runs off

**11. The word “modified” in the passage is closest in meaning to**

- (A) changed
- (B) blocked
- (C) increased
- (D) weakened

**12. According to paragraph 5, which of the following is a factor responsible for the greater air turbulence in urban environments?**

- (A) The high speed of the winds travelling above cities
- (B) The greater rainfall totals recorded in cities
- (C) Attempts to reduce urban air pollution
- (D) The effects of tall buildings on airflow

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Another possibility is for the heat island to be stretched along the course of major rivers, since large waterways typically have a warming effect on the air directly above them.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Cities create climatic conditions of their own through their physical structure and urban activities.

**Answer choices**

- (A) The amount of heat produced in a city will be reduced when cities use the heat from cars to warm homes.
- (B) The built-up landscape of the city readily becomes a heat island, with greater water runoff and special climatic conditions such as low relative humidity and increased air turbulence.
- (C) The materials from which cities are built and the effects of pollution domes help make urban areas warmer than rural areas.
- (D) Cities tend to be warmer than their surrounding areas, in part because they produce heat by burning fuel for heating, powering vehicles, and industrial production.
- (E) In most cities, the heating that results from solar radiation is intensified by carbon dioxide, a gas that is present at very high concentrations in cities' atmospheres.
- (F) During periods without rainfall, the air in cities heats up and causes winds to slow down, with the result that pollutants are not dispersed.

### 参考答案与解析

1. 选 **C**。enormous 巨大的，答案 C 的 very large。
  2. 选 **B**。surpass 超过，答案是 be higher than。
  3. 选 **B**。以 warmed house 和 outside air 做关键词定位至第二句，说当房间隔热差的时候，热量散失最快，所以散失的快慢应该取决于房屋的隔热状况，所以正确答案是 B，其他答案都没说。
  4. 选 **C**。EXCEPT 题，排除法。A 的 motor vehicles 做关键词定位至第一句的 cars，说 fuel 燃烧不是唯一来源，明显是一个来源，所以 A 正确，不选；B 在上一段有说到，所以也正确，不选；C 的 vegetation 做关键词定位至第五句，但说的是 countryside，没说 urban，所以 C 错，选；D 的 reflection 做关键词定位至两个 ways 的第一个，正确，不选。
  5. 选 **D**。以 lower heat capacity 做关键词定位至第五句，说农村的 heat capacity 低于城市是因为植被覆盖使得 heat 不那么容易进入或者流出地表，所以正确答案是 D。A 的 only source，B 的 construction materials 都没说，C 说反了，原文说不那么容易。
  6. 选 **A**。问整段的，看开头和第二句。首句说机动车不是唯一因素，第二句说还有两个其他的因素，然后详细叙述了这两个因素是什么，所以正确答案是 A。B 的 early analysis，C 的 work against it 和 D 的 less well understood 都没说，而且 A 特别提到了 two causes for the second factor。
  7. 选 **D**。configuration 形状，轮廓，D 正确。
  8. 选 **C**。以 difference 和 well-developed heat island 定位至第五和第六句，说 well developed 的热岛里的变化是非常大的，在冬天，繁忙街道可以比不繁忙的高 17 度，后来说信号灯所
- 在的位置比没有信号灯的位置热，都在说交通，所以 C 是对的，说城市的繁忙情况，包括交通。A 的 size，B 的 intensity 和 D 的 insulation materials 都没说到。
9. 选 **D**。以 intensity 做关键词定位至倒数三句，说城市越大 intensity 越强，还取决于 layout, population density 和 productive activity，所以正确答案是 D，而且也可以根据上一题得出这个答案。A 说反了，如果 population 少 intensity 应该下降；B 的 shift 和 C 的 age 都没说。
  10. 选 **D**。以 rainfall 做关键词定位至第三句，说城市的建筑大多是不透水的，即使是最小的雨也会流走，这是城市地表干燥的原因，所以正确答案是 D。A 的 gentle rain much more common，B 的 speed up 和 C 的 longer periods of dry weather 原文都没说，不选。
  11. 选 **A**。modify 改变，正确答案是 change。
  12. 选 **D**。以 air turbulence 做关键词定位至倒数第三句，说 air turbulence 增加是因为高层建筑影响气流，所以正确答案是 D。A 的 high speed，B 的 rainfall 和 C 的 air pollution 原文都没说，不选。
  13. 选 **C**。两个过渡点，another 和动词 stretch。凭借 stretch 可以确定 B 或者 C 正确。但后因为有 another，所以之前必须有一个例子，所以正确答案是 C 不是 B。
  14. 选 **BCD**。A 选项原文没说，不选；B 选项对应原文第四段开头和第五段，正确；C 选项对应原文第三段第二句，正确；D 选项对应原文第三段，正确；E 选项中的 carbon dioxide 原文没说，不选；F 选项中的 without rainfall 原文没说，不选。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



## 自我评价

用时：      分      秒

难度：易 / 中 / 难

错误：      个

## Seventeenth-Century Dutch Agriculture

Agriculture and fishing formed the primary sector of the economy in the Netherlands in the seventeenth century. Dutch agriculture was modernized and commercialized new crops and agricultural techniques raised levels of production so that they were in line with market demands, and cheap grain was imported annually from the Baltic region in large quantities. According to estimates, about 120,000 tons of imported grain fed about 600,000 people: that is about a third of the Dutch population. **Importing the grain, which would have been expensive and time consuming for the Dutch to have produced themselves, kept the price of grain low and thus stimulated individual demand for other foodstuffs and consumer goods.**

Apart from this, being able to give up labor-intensive grain production freed both the land and the workforce for more productive agricultural divisions. The peasants specialized in livestock husbandry and dairy farming as well as in cultivating industrial crops and fodder crops: flax, madder, and rape were grown, as were tobacco, hops, and turnips. These products were bought mostly by urban businesses. There was also a demand among urban consumers for dairy products such as butter and cheese, which, in the sixteenth century, had become more expensive than grain. The high prices encouraged the peasants to improve their animal husbandry techniques; for example, they began feeding their animals indoors in order to raise the milk yield of their cows.

In addition to dairy farming and cultivating industrial crops, a third sector of the Dutch economy reflected the way in which agriculture was being modernized-horticulture. ■ In the sixteenth century, fruit and vegetables were to be found only in gardens belonging to wealthy people. ■ This changed in the early part of the seventeenth century when horticulture became accepted as an agricultural sector. ■ Whole villages began to cultivate fruit and vegetables. ■ The produce was then transported by water to markets in the cities, where the consumption of fruit and vegetables was no longer restricted to the wealthy.

As the demand for agricultural produce from both consumers and industry increased, agricultural land became more valuable and people tried to work the available land more intensively and to reclaim more land from wetlands and lakes. In order to increase production on existing land, the peasants made more use of crop rotation and, in particular, began to apply animal waste to the soil regularly, rather than leaving the fertilization process up to the grazing livestock. For the first time industrial waste, such as ash from the soap-boilers, was collected in the cities and sold in the country as artificial fertilizer. The increased yield and price of land justified reclaiming and draining even more land.

The Dutch battle against the sea is legendary. Noorderkwartier in Holland, with its numerous lakes and stretches of water, was particularly suitable for land reclamation and one of the biggest projects undertaken there was the draining of the Beemster lake which began in 1608. The richest merchants in Amsterdam contributed money to reclaim a good 7,100 hectares of land. Forty-three windmills powered the drainage pumps so that they were able to lease the reclamation to farmers as early as 1612, with the investors receiving annual leasing payments at an interest rate of 17 percent. Land reclamation continued, and between 1590 and 1665, almost 100,000 hectares were reclaimed from the wetland areas of Holland, Zeeland, and Friesland. However, land reclamation decreased significantly after the middle of the seventeenth century because the price of agricultural products began to fall, making land reclamation far less profitable in the second part of the century.

Dutch agriculture was finally affected by the general agricultural crisis in Europe during the last two decades of the seventeenth century. However, what is astonishing about this is not that Dutch agriculture was affected by critical phenomena such as a decrease in sales and production, but the fact that the crisis appeared only relatively late in Dutch agriculture. In Europe as a whole, the exceptional reduction in the population and the related fall in demand for grain since the beginning of the seventeenth century had caused the price of agricultural products to fall. Dutch peasants were able to remain unaffected by this crisis for a long time because they had specialized in dairy farming industrial crops, and horticulture. However, toward the end of the seventeenth century, they too were overtaken by the general agricultural crisis.

1. **By indicating that production was in line with market demands the author means that Dutch farmers were able to**
  - (A) exceed other European countries in agricultural production
  - (B) produce crops that were similar to those popular in other European countries
  - (C) supply sufficient quantities of the agricultural products that the Dutch population wanted to buy
  - (D) satisfy the demand for high quality agricultural products from the Baltic region
2. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Buying imported grain led to the Dutch demanding that other foodstuffs and consumer goods be imported.
  - (B) Because the Dutch were able to import inexpensive grain, they had money available to create a demand for other food products and consumer goods.
  - (C) Keeping the price of grain low was a primary goal of the Dutch at a time when they could not produce enough grain to provide for all their needs.
  - (D) The demand for other foodstuffs and consumer goods forced the Dutch to import grain and other products at a time when maintaining low prices was especially important.
3. **The phrase “Apart from” in the passage is closest in meaning to**
  - (A) Besides
  - (B) Despite
  - (C) As a result of
  - (D) Instead of
4. **According to paragraph 2, the increases demands on Dutch agriculture made by urban consumers had which of the following results?**
  - (A) Seasonal shortages of the products consumers most wanted
  - (B) Increased production of high-quality grain products
  - (C) Raised prices charged by peasants to urban consumers
  - (D) Different ways of caring for dairy-producing animals
5. **The word “consumption” in the passage is closest in meaning to**
  - (A) sale
  - (B) storage
  - (C) exportation
  - (D) utilization
6. **According to paragraph 3, the modernization of agriculture in the Netherlands was evident in all of the following ways EXCEPT**
  - (A) The production of fruits and vegetables became a commercial venture.
  - (B) The wealthy stopped growing fruits and vegetables in their gardens and grew flowers instead.
  - (C) Horticultural produce was transported to city markets by water.
  - (D) Many more people were able to afford to eat fresh fruits and vegetables.
7. **Select the TWO answer choices that, according to paragraph 4, indicate two methods people used to increase the productivity of their land.**
  - (A) They planted different crops in different sections of the farm each year.
  - (B) They used improved irrigation methods to increase the yield of crops.
  - (C) They increased the use of fertilizers to supply more nutrients to plants.
  - (D) They used new horticultural practices to produce different varieties of plants in the same section of the farm.
8. **The word “they” in the passage refers to**
  - (A) merchants
  - (B) hectares
  - (C) windmills
  - (D) drainage pumps

**9. According to paragraph 5, which of the following was an important reason why land-reclamation projects in the first half of the seventeenth century proceeded rapidly?**

- (A) Windmills became powerful enough to run drainage pumps efficiently.
- (B) Merchants invested large amounts of money in reclamation.
- (C) High interest rates discouraged people from buying land already available.
- (D) Reclaimed land was much more suitable for agriculture than the existing land.

**10. The word “legendary” in the passage is closest in meaning to**

- (A) continuous
- (B) well documented
- (C) famous
- (D) expensive

**11. The word “astonishing” in the passage is closest in meaning to**

- (A) incredible
- (B) unfortunate
- (C) predicted
- (D) evident

**12. Which of the following best describes the organization of the passage?**

- (A) A presentation of a theory and the evidence in favor of it
- (B) A general statement followed by examples and relevant details
- (C) A analysis of a problem and its solution
- (D) A series of statements leading to a conclusion

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Some villages specialized in growing cabbages and carrots; others grew onions, mustard, and coriander; and still others produced fruit and cultivated trees in nurseries.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Agriculture formed one of the primary sectors of the economy in seventeenth-century Netherlands.

**Answer choices**

- (A) The Baltic region produced large quantities of grain for export to other regions, including the Netherlands.
- (B) The richest people grew enough fruits and vegetables to supply the entire country with fresh produce.
- (C) An agricultural crisis that began in Europe did not affect Dutch land-reclamation projects.
- (D) Specialization in dairy farming, industrial crops, and horticulture allowed the Dutch to be more productive than some other regions in Europe.
- (E) Land reclamation and improvement allowed the Dutch to meet demands for their agricultural products.
- (F) Because the Dutch had specialized their agricultural output they were less susceptible to the crisis that Europe experienced from the beginning of the century.

### 参考答案与解析

1. 选 **C**。以 market demands 定位至第二句，说农业现代化，commercialized 的作物和先进的 agricultural technique 使得产量升高，从而可以满足市场的需要，因此这些人满足市场需要的原因是作物的产量高，所以正确答案是 C。A 和 B 都完全没提到，D 错，因为原文说的是从 Baltic 进口，不是满足 Baltic 的需要。
2. 选 **B**。将两个逗号之间的从句去掉，得到 import 使得价格下降，因此刺激需求，所以正确答案是 B。选项 A 的进口其他食物和 C 的 primary goal 原文都没说，D 的结构完全和原文不相干，错。
3. 选 **A**。apart from 除……之外，答案 besides。
4. 选 **D**。以 urban consumers 做关键词定位至倒数第二句，说城市消费者需要奶制品，而奶制品比谷物价格贵得多，但这句只说了现象，没说结果，往下看，高价使农民改善了牲畜饲养技术，所以答案是 D。A 的 shortage 原文没说，B 的 grain 是原文说放弃的，C 的 high price 不是农民收的。
5. 选 **D**。consumption 消费，所以答案是 D。
6. 选 **B**。EXCEPT 题，排除法。A 选项没有很好的关键词，暂时放弃；B 的 flower 没说，原文说的是不只是富人种蔬果，不是富人改种花，所以 B 说反，选；C 的 city markets by water 做关键词定位至最后一句，正确，不选；同时这句话也说了 D 选项也正确，不选；倒数第二句说整个村子都种蔬果，也就是 A 说的 commercial venture，A 正确，不选。
7. 选 **AC**。以 increase the productivity 做关键词定位至第二句，说用 animal waste 和 crop rotation 来提高土地的生产率，A 的 different crops in different sections 和原文的 crop rotation 是同义替换，正确；C 的 fertilizer 是原文 animal waste 的同义替换，所以正确答案是 A 和 C。B 的 irrigation methods 和 D 的 new horticultural practices 原文没说。
8. 选 **A**。本来往前看主语应该选 windmills 的，但代入后发现不对，只有人才能 lease the reclamation，所以正确答案是前句的主语 merchants，答案 A。
9. 选 **B**。以 land-reclamation projects in the first half of the seventeenth century 做关键词定位至第二句，说 N 这个地方特别适合 land reclamation，又说最大的工程是 1608 年排开 B 湖的水，但一直都没说原因，所以往下看。下一句说阿姆斯特丹的富商给了钱，这才是 land reclamation 的原因，所以正确答案是 B。A，C 和 D 都没说。
10. 选 **C**。legendary 传奇的，所以正确答案是 C。
11. 选 **A**。astonishing 吃惊的，所以正确答案是 A。
12. 选 **B**。问全文的题，看各段开头。第一段首句说农业和渔业是十七世纪荷兰经济最主要的部分，第二段到第四段都在说农业的变迁，第五段说围海造地，第六段说受到整体危机的影响，整个都围绕农业展开的，所以正确答案是 B。第一段提出的不是一个理论，A 错，也没有提出问题，C 错，D 的分总式与原文完全相反，错。
13. 选 **D**。以 villages 作过渡点可以确定答案是 C 或者 D，待插入句与 C 和 D 点之间的那个句子是总分关系，所以应该先总述 village 开始 cultivate，再分述不同的 village 干嘛干嘛，正确答案是 D。
14. 选 **DEF**。A 选项是第一段提到的一个细节，而且第一段也没说 B 地区的 grain 很多，不选；B 选项的相关信息在第三段有提到，但第三段说的是后来不仅限于有钱人种蔬果，也从来没过有钱人种蔬果提供给所有人，不选；C 选项与第六段首句相反，不选；D 选项对应原文第三段首句，正确；E 选项对应第五段，正确；F 选项对应最后一段倒数第二句，正确。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Rock Art of the Australia Aborigines**

Ever since European first explored Australia, people have been trying to understand the ancient rock drawings and carvings created by the Aborigines, the original inhabitants of the continent. Early in the nineteenth century, encounters with Aboriginal rock art tended to be **infrequent** and open to speculative interpretation, but since the late nineteenth century, awareness of the extent and variety of Australian rock art has been growing. In the latter decades of the twentieth century there were intensified efforts to understand and record the abundance of Australian rock art.

The systematic study of this art is a **relatively** new discipline in Australia. Over the past four decades new discoveries have steadily added to the body of knowledge. The most significant data have come from a concentration on three major questions. First, what is the age of Australian rock art? Second, what is its stylistic organization and is it possible to **discern** a sequence or a pattern of development between styles? Third, is it possible to interpret accurately the subject matter of ancient rock art, bring to bear all available archaeological techniques and the knowledge of present-day Aboriginal informants? ■

The age of Australia's rock art is constantly being **revised**, and earlier datings have been proposed as the result of new discoveries. ■ Currently, reliable scientific evidence dates the earliest creation of art on rock surfaces in Australia to somewhere between 30,000 and 50,000 years ago. ■ This in itself is an almost incomprehensible span of generations, and one that makes Australia's rock art the oldest continuous art tradition in the world. ■

Although the remarkable antiquity of Australia's rock art is now established, the sequences and meanings of its images have been widely debated. Since the mid-1970s, a reasonably stable picture has formed of the organization of Australian rock art. In order to create a sense of structure to this picture, researchers have relied on a distinction that still underlies the forms of much indigenous visual culture—a distinction between geometric and figurative elements. Simple geometric repeated patterns—circles, concentric circles, and lines—constitute the iconography (characteristic images) of the earliest rock-art sites found across Australia. **The frequency with which certain simple motifs appear in these oldest sites has led rock-art researchers to adopt a descriptive term—the Panaramitee style—a label which takes its name from the extensive rock pavements at Panaramitee North in desert South Australia, which are covered with motifs pecked into the surface.** Certain features of these engravings lead to the conclusion that they are of great age—geological changes had clearly happened after the designs had been made and local Aboriginal informants, when first questioned about them, seemed to know nothing of their origins. Furthermore, the designs were covered with "desert varnish," a glaze that develops on rock surfaces over thousands of years of exposure to the elements. The simple motifs found at Panaramitee are common to many rock-art sites across Australia. Indeed, sites with engravings of geometric shapes are also to be found on the island of Tasmania, which was separated from the mainland of the continent some 10,000 years ago.

In the 1970s when the study of Australian archaeology was in an exciting phase of development, with the great antiquity of rock art becoming clear. Lesley Maynard, the archaeologist who coined the phrase "Panaramitee style," suggested that a sequence could be determined for Australian rock art, in which a geometric style gave way to a simple figurative style (outlines of figures and animals), followed by a range of complex figurative styles that, unlike the pan-Australian geometric tradition, tended to much greater regional diversity. While accepting that this sequence fits the archaeological profile of those sites, which were occupied continuously over many thousands of years a number of writers have warned that the underlying assumption of such a sequence—a development from the simple and the geometric to the complex and naturalistic—obscures the cultural continuities in Aboriginal Australia, in which geometric symbolism remains fundamentally important. In this context the simplicity of a geometric motif may be more apparent than real. Motifs of seeming simplicity can encode complex meanings in Aboriginal Australia. And has not twentieth-century art shown that naturalism does not necessarily follow abstraction in some kind of predetermine sequence?

1. The word **“infrequent”** in the passage is closest in meaning to
  - (A) puzzling
  - (B) uncommon
  - (C) questionable
  - (D) undocumented
2. According to paragraph 1, the twentieth-century approach to studying Australian rock art was different from earlier approaches because the twentieth-century approach
  - (A) recognized that many different groups of Aborigines created Australian rock art
  - (B) concentrated on a limited range of Aboriginal rock art
  - (C) examined Aboriginal art from an Aboriginal rather than from a European perspective
  - (D) focused more intensely on understanding and documenting rock art
3. The word **“relatively”** in the passage is closest in meaning to
  - (A) completely
  - (B) comparatively
  - (C) apparently
  - (D) particularly
4. The word **“discern”** in the passage is closest in meaning to
  - (A) indicate
  - (B) apply
  - (C) identify
  - (D) repeat
5. The word **“revised”** in the passage is closest in meaning to
  - (A) discussed
  - (B) raised
  - (C) challenged
  - (D) changed
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The oldest rock art sites have simpler motifs than the best known sites of Panaramitee North.
  - (B) Because motifs primarily associated with the Panaramitee region are common in the oldest sites the term Panaramitee style has become the general term for rock art of this type.
  - (C) Because the Panaramitee style is so common in the older sites, researchers have described it most extensively.
  - (D) The motifs carved in the rocky surface of the Panaramitee region make up the oldest form of rock art discovered in Australia.
7. According to paragraph 4, researchers have organized and structured Australian rock art by distinguishing between which of the following?
  - (A) Images found at Panaramitee North and images found in other parts of Australia
  - (B) Images found in a particular type of rock layer and images found in other types of rock layers
  - (C) Images that have geometric elements and images that have figurative elements
  - (D) Images that are typically found and image that are rarely found
8. According to paragraph 4, all of the following are signs of the great age of the Panaramitee engravings EXCEPT
  - (A) The engravings consisted of simple animal drawings.
  - (B) The engravings were covered with a layer of a substance known as “desert varnish”.
  - (C) Local Aborigines who were asked knew nothing about the origin of the engravings.
  - (D) Geologic changes had occurred after the engravings were made.
9. Why does the author include information about Tasmania in paragraph 4?
  - (A) To provide evidence that the Panaramitee style is widespread and of great age
  - (B) To prove that Aboriginal Australians could not have made the carvings in Tasmania
  - (C) To indicate how researchers have determined how long ago Tasmania separated from the mainland

(D) To illustrate the importance of geometric rock art to tourism in Tasmania

**10. According to paragraph 5, the complex figurative style differs from the geometric style in that the complex figurative style**

- (A) varies significantly from region to region
- (B) is more meaningful
- (C) appears on only a few types of rocks
- (D) has changed little overtime

**11. According to paragraph 5, Lesley Maynard made which of the following suggestions about Australian rock art?**

- (A) There were a pattern of human figures being represented in a more complex style than animal figures.
- (B) Australian archaeology should concentrate on determining the sequence of styles that led up to the Panaramitee style.
- (C) The great antiquity of Australian rock art would probably make it impossible to determine the ages of the various styles found in rock art.
- (D) The geometric style of Australian rock art was replaced by increasingly complex figurative styles.

**12. In paragraph 5, the author indicates that twentieth century art has shown that naturalism does not necessarily follow abstraction in some kind of predetermined sequence in order to**

- (A) emphasize that it may not be possible to determine what the figures in ancient rock art represent
- (B) suggest a reply to those who have questioned Maynard's interpretation of the sequence of Australian rock art
- (C) provide a counterexample to Maynard's interpretation of the sequence of Australian rock art
- (D) indicate that twentieth century art is more advanced than ancient rock art

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

While a great deal of information exists, the answers to these questions are not yet definitive.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Interest in the rock art of the original inhabitants of Australia has grown over the last two centuries.

**Answer choices**

- (A) Late nineteenth century studies of Aboriginal rock art failed to recognize that a variety of styles existed.
- (B) The extreme age of the earliest Aboriginal rock art has been established but the interpretation of rock art images is still debated.
- (C) A sequence from geometric to more representative art fits many sites but does not necessarily indicate a progression from simple to complex meaning.
- (D) In determining the way in which Australian rock art was organized, archaeologists have made little distinction between geometric and figurative elements.
- (E) Older examples of rock art consist of simple, repeated geometric patterns while later rock art includes figures and animals.
- (F) Aboriginal informants were able to explain the meanings of ancient rock art symbols.

### 参考答案与解析

1. 选 **B**。infrequent 不频繁的，答案 uncommon。
2. 选 **D**。以二十世纪做关键词定位至最后一句，说二十世纪的后几十年人们花更多功夫在理解和记录 rock art 的 abundance 上，所以正确答案是 D。
3. 选 **B**。relatively 相对地，答案 comparatively。
4. 选 **C**。discern 辨别，察觉，答案是 identity。
5. 选 **D**。revise 修改，所以正确答案是 change。
6. 选 **B**。原句的结构是 frequency 导致专家采用了一个 term，lead to 说明存在因果关系，正确答案是 B。A 比较关系错，不选；C 的结果与原文不同，不选；D 的结构跟原文完全不沾边，不选。
7. 选 **C**。以 structure 和 distinguish 双关键词定位至第三句和第四句，注意原文的 distinction 和 distinguish 是一回事儿，而且破折号和 between 也能帮我们定位，所以正确答案是 C，区分开 geometric 和 figurative，别的都没说。
8. 选 **A**。EXCEPT 题，排除法。A 的 simple animal drawing 原文没说，错，选；B 的 desert varnish 做关键词定位至倒数第三句，都说 covered with desert varnish，正确，不选；C 的 know nothing about the origins 做关键词定位至倒数第四句，know nothing about their origins，正确，不选；另外这句话也说到了 D 的 geologic changes，所以 D 也正确，不选。
9. 选 **A**。先以 Tasmania 定位至最后一句，但整个句子都是例子，因此往前看，前一句说在 P 处出现的 motif 在整个澳洲都很普遍，紧接着就说了塔斯马尼亚的例子，也就是说塔斯曼尼亚无非就是说普遍，所以答案是 A，其他都没说。
10. 选 **A**。找两个 style 的不同，第二句不仅说到了两个 style，而且用 unlike 说了两者的不同，所以是信息所在。这句说跟泛澳洲的 geometric 不同，figurative 有更大的区域性特征，也就是说不同区域有区别，所以正确答案是 A 的 from region to region，剩下三个选项都没说。
11. 选 **D**。以人名做关键词定位至第二句，说澳洲 rock art 有顺序，先是 geometric，再到简单的 figurative，后来是复杂 figurative，只有 D 说到了被复杂的取代，是正确答案。A 和 C 都没说，B 说到了 sequence，但这个顺序已经确定了，而不是 B 说的 determine，所以 B 也不对。
12. 选 **C**。这个修辞目的题比较特殊，作者提到的修辞点在最后一句，往前看，前一句也不是中心，按常理应该看段首，但由于这段段首也不是中心，所以也不对。无奈只有往回找，找到倒数第四句，说这个从简单到复杂的顺序模糊了 cultural continuity，也就是说作者说 naturalism 不一定跟着 abstraction 是为了说明这个顺序不对，之前 M 说有这个顺序，所以答案是 C，提供一个反例给 M 的 interpretation。A 和 D 没说，B 说反。
13. 选 **A**。一个过渡点就够了，是代词词组 these questions，四个插入点中只有 A 之前有问题，所以正确答案是 A。
14. 选 **BCE**。A 选项与原文第一段倒数第二句说反，不选；B 选项对应原文第四段首句，正确；C 选项对应原文第四段和第五段的结尾，正确；D 选项与原文第五段第二句说反，不选；E 选项对应原文第五段第二句，正确；F 选项与原文第四段倒数第四句说反，不选。

### 笔记区

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用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Lake Water**

Where does the water in a lake come from, and how does water leave it? Water enters a lake from inflowing rivers, from underwater seeps and springs, from overland flow off the surrounding land, and from rain falling directly on the lake surface. Water leaves a lake via outflowing rivers, by soaking into the bed of the lake, and by evaporation. **So much** is obvious.

The questions become more complicated when actual volumes of water are considered: how much water enters and leaves by each route? Discovering the inputs and outputs of rivers is a matter of measuring the discharges of every inflowing and outflowing stream and river. Then exchanges with the atmosphere are calculated by finding the difference between the **gains** from rain, as measured (rather roughly) by rain gauges, and the losses by evaporation, measured with models that correct for the other sources of water loss. For the majority of lakes, certainly those surrounded by forests, input from overland flow is too small to have a noticeable effect. Changes in lake level not explained by river flows plus exchanges with the atmosphere must be due to the net difference between what seeps into the lake from the groundwater and what leaks into the groundwater. **Note the word "net"**: measuring the actual amounts of groundwater seepage into the lake and out of the lake is a much more complicated matter than merely inferring their difference.

Once all this information has been gathered, it becomes possible to judge whether a lake's flow is mainly due to its surface inputs and outputs or to its underground inputs and outputs. ■ If the former are greater, the lake is a surface-water-dominated lake; if the latter, it is a seepage-dominated lake. ■ Occasionally, common sense tells you which of these two possibilities applies. ■ For example, a pond in hilly country that maintains a steady water level all through a dry summer in spite of having no streams flowing into it must obviously be seepage dominated. **Conversely**, a pond with a stream flowing in one end and out the other, which dries up when the stream dries up, is clearly surface water dominated. ■

By whatever means, a lake is constantly gaining water and losing water: its water does not just sit there, or, anyway, not for long. This raises the matter of a lake's residence time. The residence time is the average length of time that any particular molecule of water remains in the lake, and it is calculated by dividing the volume of water in the lake by the rate at which water leaves the lake. The residence time is an average; the time spent in the lake by a given molecule (if we could follow its fate) would depend on the route it took: it might flow through as part of the fastest, most direct current, or it might circle in a backwater for an indefinitely long time.

Residence times vary enormously. They range from a few days for small lakes up to several hundred years for large ones; Lake Tahoe, in California, has a residence time of 700 years. The residence times for the Great Lakes of North America, namely, Lakes Superior, Michigan, Huron, Erie, and Ontario, are, respectively, 190, 100, 22, 2.5, and 6 years. Lake Erie's is the lowest: although its area is larger than Lake Ontario's, its volume is less than one-third as great because it is so shallow—less than 20 meters on average.

A given lake's residence time is by no means a fixed quantity. It depends on the rate at which water enters the lake, and that depends on the rainfall and the evaporation rate. Climatic change (the result of global warming?) is dramatically affecting the residence times of some lakes in northwestern Ontario, Canada. In the period 1970 to 1986, rainfall in the area decreased from 1,000 millimeters to 650 millimeters per annum, while above-average temperatures speeded up the evapotranspiration rate (the rate at which water is lost to the atmosphere through evaporation and the processes of plant life). The result has been that the residence time of one of the lakes increased from 5 to 18 years during the study period. The slowing down of water renewal leads to a chain of **further** consequences; it causes dissolved chemicals to become increasingly concentrated, and this, in turn, has a marked effect on all living things in the lake.

1. The phrase **“So much”** in the passage refers to
  - (A) the negative effects of overland flow, rain, and evaporation on river water levels
  - (B) water that a lake loses to outflowing rivers, to the lake bed, and to evaporation
  - (C) the importance of rivers to the maintenance of lake water levels
  - (D) the information given about ways that water can enter or exit a lake
2. The word **“gains”** in the passage is closest in meaning to
  - (A) results
  - (B) increases
  - (C) resources
  - (D) savings
3. Which of the following can be inferred from paragraph 2 about the movement of water into a lake?
  - (A) Heavy rain accounts for most of the water that enters into lakes.
  - (B) Rainfall replaces approximately the amount of water lost through evaporation.
  - (C) Overland flow into lakes is reduced by the presence of forests.
  - (D) Seepage has a smaller effect on water level than any other input.
4. Why does the author use the phrase **“Note the word ‘net’”** in the passage?
  - (A) To emphasize the impact of seepage on water levels
  - (B) To point out that seepage is calculated differently from river flows and atmospheric exchanges
  - (C) To compare the different methods of calculating seepage
  - (D) To emphasize the difficulty of obtaining specific values for seepage inputs and outputs
5. The word **“Conversely”** meaning to
  - (A) On the other hand
  - (B) In the same way
  - (C) In other words
  - (D) On average
6. According to paragraph 3, which of the following best describes a seepage-dominated lake?
  - (A) A lake that is fed by streams but still has fluctuating water levels
  - (B) A lake with a constant water level that has no streams or rivers as inputs
  - (C) A lake with a stream flowing into it and a stream flowing out of it
  - (D) A lake that has surface and underground inputs but loses water during dry seasons
7. It can be inferred from paragraph 4 that the length of time a given molecule of water remains in a lake
  - (A) depends entirely upon the average speed of a lake’s currents
  - (B) can be measured by the volume of the lake alone
  - (C) can be greater or lesser than the residence time
  - (D) is similar to the length of time all other molecules remain in that lake
8. According to paragraph 5, Lake Erie’s residence time is lower than Lake Ontario’s for which of the following reasons?
  - (A) Lake Erie has a larger area than Lake Ontario.
  - (B) Lake Ontario is shallower than Lake Erie.
  - (C) Lake Ontario has a greater volume than Lake Erie.
  - (D) Lake Erie receives less rainfall than Lake Ontario.
9. Why does the author discuss the Great Lakes in paragraph 5?
  - (A) To demonstrate the extent to which residence times vary from lake to lake
  - (B) To illustrate how residence times are calculated for specific lakes
  - (C) To argue that the residence time of a lake increases with area
  - (D) To emphasize that Lake Tahoe’s residence time is unusually long
10. The word **“further”** in the passage is closest in meaning to
  - (A) expected
  - (B) additional
  - (C) serious
  - (D) unfortunate

**11. According to paragraph 6, which of the following explains the increase in residence time of some lakes of northwestern Ontario?**

- (A) The amount of water flowing into the lakes has increased.
- (B) The rate of evaporation has decreased more sharply than the amount of rainfall.
- (C) The renewal of the lakes' water has slowed due to changes in climate.
- (D) Plants have required less water from the lakes.

**12. According to paragraph 6, residence time is affected by all of the following EXCEPT**

- (A) amount of rainfall
- (B) rate of evaporation
- (C) temperature of surrounding air
- (D) concentration of chemicals in lake water

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Of course, a lake may be neither surface-water-nor seepage-dominated if, for example, its inputs are predominantly surface and its outputs are predominantly seepage.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Water enters, remains, and eventually leaves a lake in a variety of ways.

**Answer choices**

- (A) By measuring the water quantities at each of a lake's inputs and outputs, it can be determined whether water enters the lake mainly from surface or groundwater sources.
- (B) Changes in lake level and volume are caused principally by the amount of evaporation of water into the atmosphere.
- (C) It is sometimes possible to decide whether a lake is surface water dominated or seepage dominated by simple observation at different seasons.
- (D) The average period of time that molecules of water spend in a lake—the residence time—varies from lake to lake and overtime within a particular lake.
- (E) The residence times of surface-water-dominated lakes are usually longer than those of seepage-dominated lakes.
- (F) The residence time of a lake frequently depends on the kinds of organisms to be found in the lake.

## 笔记区

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## 参考答案与解析

1. 选 **D**。So much 指代前文，说 water 是怎么 enter 怎么 leave 的，所以正确答案是 D。注意 B 貌似也对，但代入之后是有问题的，因为 water 不是 obvious 的，因此 so much 不仅指代它的前句，还指代前一句的前一句。
2. 选 **B**。gain 获得，正确答案 B。
3. 选 **C**。此题关键词难找，可以用排除法，当然也可以根据有序性往下找。这里我们用排除法。A 的 heavy rain 和 most of the water 原文完全没有相关信息，错；B 的 evaporation 和 rainfall 定位至第三句，但文章明确说了可以通过蒸发跟雨水获得的差值计算湖水与大气的交换，也就是说二者是有差异的，B 说反；C 的 forests 做关键词定位至第四句，说周围有森林的湖陆上来水很难有明显影响，推出 C 说水量减少是正确选项，因果关系；D 的 seepage 做关键词定位至最后，但原文没有任何比较的相关信息，错。
4. 选 **D**。修辞目的题，先读修辞点所在的句子，说测量真实的渗入和渗出的水量比只是测算两者的差值难，所以正确答案是 D，得出具体值很难。其他答案都没说。
5. 选 **A**。Conversely 相反地，正确答案是 A。
6. 选 **B**。以 seepage-dominated lake 做关键词定位至第二句或者倒数第二句，都是可以的。第二句说如果 underground 大的话就是 seepage，倒数第二句说如果没有地表水注入的 pond 依然能维持水量就是 seepage-dominated，所以无论定位至哪句话答案都是 B。其他三个答案都提到了地表水，与原文相反，错。
7. 选 **C**。以 a given molecule of water 做关键词定位至最后一句，说 residence time 是平均值，一个分子在 lake 里的时间取决于它的 route，有可能很快也有可能很慢，所以正确答案是 C，或者多或者少。A 和 B 原文没说；D 说反，原文都说了一个具体的分子和 residence time 不一样，错。
8. 选 **C**。以两个专有名词定位至最后一句，说 E 的 residence time 是最小的，尽管 E 面积比 O 大，但 volume 小，所以正确答案是 C，注意不要深挖一层选 B，因为 shallow 是 volume 少的原因，但它不能直接导致 residence time 变小。
9. 选 **A**。修辞目的题，先看例子所在句，发现整句话都是例子，所以往前看，前一句也是例子，所以看开头句，开头句说 residence time 变化很大，也就是说，后面举了一大堆湖都是为了说它们的 residence time 不同，从而证明变化很大，所以正确答案是 A，注意提到五大湖不是为了跟 T 湖对比，因为 T 湖本身也是个例子，所以 D 错，其他的更不靠谱。
10. 选 **B**。further 进一步，答案是 additional。
11. 选 **C**。以 northwestern Ontario 和 increase 双关键词定位至倒数第二句，但这句话只是说增加，没给出具体的解释，往下看。下一句说 slowing down of water renewal 会带来一系列后果，也就是前文说的降水减少也好蒸发量增加也罢都属于 renewal 减慢，所以正确答案是 C，其他答案都没说。
12. 选 **D**。EXCEPT 题，排除法。A 的 rainfall，B 的 evaporation 和 C 的 temperature 做关键词都可以定位至第四句，都正确，不选；而 D 的 chemicals 做关键词定位至最后一句，但 chemical 的浓度是 renewal 减慢带来的影响，不是 residence time 的决定因素，错，选。而且根据上题也可以直接得出这道题的答案是 D。
13. 选 **D**。如果只是以 surface water dominated 和 seepage-dominated 做过渡点会发现所有答案都可以，但由于待插入句中有 neither...nor，因此必须在前文把这些概念都说完之后才可以说既不是这个也不是那个，所以正确答案是 D。
14. 选 **ACD**。A 选项对应第三段前半部分，正确；B 选项原文没说，不选；C 选项对应第三段后半部分，正确；D 选项对应第五段首句，而且第六段也在说变化，正确；E 选项原文没说，不选；F 选项中的 organism 是 renewal 减慢带来的影响，不是 residence time 的决定因素，不选。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## Breathing During Sleep

Of all the physiological differences in human sleep compared with wakefulness that have been discovered in the last decade, changes in respiratory control are most dramatic. Not only are there differences in the level of the functioning of respiratory systems, there are even changes in how they function. Movements of the rib cage for breathing are reduced during sleep, making the contractions of the diaphragm more important. ■ Yet because of the physics of lying down, the stomach applies weight against the diaphragm and makes it more difficult for the diaphragm to do its job. ■ However, there are many other changes that affect respiration when asleep.

■ During wakefulness, breathing is controlled by two interacting systems. ■ The first is an automatic, metabolic system whose control is centered in the brain stem. It subconsciously adjusts breathing rate and depth in order to regulate the levels of carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>), and the acid-base ratio in the blood. The second system is the voluntary, behavioral system. Its control center is based in the forebrain, and it regulates breathing for use in speech, singing, sighing, and so on. It is capable of ignoring or overriding the automatic, metabolic system and produces an irregular pattern of breathing.

During NREM (the phase of sleep in which there is no rapid eye movement) breathing becomes deeper and more regular, but there is also a decrease in the breathing rate, resulting in less air being exchanged overall. This occurs because during NREM sleep the automatic, metabolic system has **exclusive** control over breathing and the body uses less oxygen and produces less carbon dioxide. Also, during sleep the automatic metabolic system is less responsive to carbon dioxide levels and oxygen levels in the blood. Two things result from these changes in breathing control that occur during sleep. First, there may be a brief cessation or reduction of breathing when falling asleep as the sleeper waxes and wanes between sleep and wakefulness and their differing control mechanisms. Second, once sleep is fully obtained, there is an increase of carbon dioxide and a decrease of oxygen in the blood that persists during NREM.

But that is not all that changes. During all phases of sleep, several changes in the air passages have been observed. It takes twice as much effort to breathe during sleep because of greater resistance to airflow in the airways and changes in the efficiency of the muscles used for breathing. Some of the muscles that help keep the upper airway open when breathing tend to become more relaxed during sleep, especially during REM (the phase of sleep in which there is rapid eye movement). Without this muscular action, **inhaling is like sucking air out of a balloon**—the narrow passages tend to collapse. Also there is a regular cycle of change in resistance between the two sides of the nose. If something blocks the “good” side, such as congestion from allergies or a cold, then resistance increases dramatically. Coupled with these factors is the loss of the complex interactions among the muscles that can change the route of airflow from nose to mouth.

Other respiratory regulating mechanisms apparently cease functioning during sleep. For example, during wakefulness there is an immediate, automatic, adaptive increase in breathing effort when inhaling is made more difficult (such as breathing through a restrictive face mask). This reflexive adjustment is totally absent during NREM sleep. Only after several inadequate breaths under such conditions, resulting in the **considerable** elevation of carbon dioxide and reduction of oxygen in the blood, is breathing effort adjusted. Finally, the coughing reflex in reaction to irritants in the airway produces not a cough during sleep but a cessation of breathing. If the irritation is severe enough, a sleeping person will arouse, clear the airway, then **resume** breathing and likely return to sleep.

Additional breathing changes occur during REM sleep that are even more dramatic than the changes that occur during NREM. **The amount of air exchanged is even lower in REM than NREM because, although breathing is more rapid in REM, it is also more irregular, with brief episodes of shallow breathing or absence of breathing.** In addition, breathing during REM depends much more on the action of the diaphragm and much less on rib cage action.

1. **According to paragraph 1, which of the following can be inferred about the diaphragm during sleep?**
  - (A) During sleep the diaphragm requires increased movement of the rib cage.
  - (B) The diaphragm helps with breathing as movements of the rib cage decrease during sleep.
  - (C) The diaphragm requires a great amount of pressure to function properly.
  - (D) The diaphragm contributes to the effective functioning of the rib cage.
2. **According to paragraph 2, all of the following are true of the voluntary breathing system EXCEPT**
  - (A) It has its control center in the brain stem.
  - (B) It controls breathing for a number of activities during wakefulness.
  - (C) It is able to bypass the automatic system.
  - (D) It produces an irregular breathing pattern.
3. **The word “exclusive” in the passage is closest in meaning to**
  - (A) consistent
  - (B) perfect
  - (C) partial
  - (D) sole
4. **According to paragraph 3, which of the following may occur just before NREM sleep begins?**
  - (A) The automatic, metabolic system may increase its dependence on air exchanges.
  - (B) Breathing can stop for a short time as a person falls asleep.
  - (C) An increase in the oxygen level in the blood can occur as sleep becomes fully obtained.
  - (D) The level of carbon dioxide in the blood may drop suddenly.
5. **What is the author’s purpose in stating that “inhaling is like sucking air out of a balloon”?**
  - (A) To refute the argument that additional effort is necessary for breathing during sleep
  - (B) To argue that REM sleep is more important than NREM sleep
  - (C) To illustrate the difficulty of breathing during sleep
  - (D) To illustrate how blockage of narrow passages can be prevented during sleep
6. **All of the following are mentioned in paragraph 4 as being characteristic of breathing during sleep EXCEPT**
  - (A) relaxation of the muscles involved in the respiratory system
  - (B) changes in resistance between the two sides of the nose
  - (C) easier airflow in the passages of the upper airway
  - (D) absence of certain complex muscle interactions
7. **According to paragraph 5, what happens during NREM sleep when inhaling is difficult?**
  - (A) There is an immediate, automatic, adaptive increase in breathing effort.
  - (B) The sleeping person takes several inadequate breaths before the breathing effort is adjusted.
  - (C) The coughing reflex causes the breathing effort to adjust.
  - (D) The airways become cleared as the blood removes irritants.
8. **It can be inferred from paragraph 5 that a very mild irritation during sleep will likely cause the sleeping person to**
  - (A) increase the breathing effort
  - (B) wake up and remove the source of irritation
  - (C) cough while still sleeping
  - (D) stop breathing temporarily while still sleeping
9. **The word “considerable” meaning to**
  - (A) significant
  - (B) steady
  - (C) usual
  - (D) necessary
10. **The word “resume” in the passage is closest in meaning to**
  - (A) reduce
  - (B) stop
  - (C) readjust

(D) restart

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Because breathing is more shallow and irregular in REM than in NREM, less air is exchanged in REM.
- (B) Breathing in NREM is less effective than breathing in REM because of irregular episodes of rapid breathing during NREM.
- (C) Because breathing is more rapid in NREM sleep than in REM sleep, breathing often becomes shallow.
- (D) Although REM has brief episodes of shallow breathing or lack of breathing, breathing is more rapid than in NREM.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

To better understand breathing during sleep, it is, however, helpful to first understand how respiration works in general.

**Where would the sentence best fit?**

**13. Directions: From the seven statements below, select the statements that correctly characterize breathing during wakefulness and those statements that correctly characterize breathing during sleep. Drag each answer choice you select into the appropriate box of the table. Two of the answer choices will NOT be used. This question is worth 3 points.**

Wakefulness (TWO):
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Sleep (THREE):
----------------

**Answer choices**

- (A) The role of the rib cage increases and the role of the diaphragm decreases.
- (B) Carbon dioxide in blood rises and oxygen drops.
- (C) The coughing reflex is extremely complex.
- (D) A great deal of effort is used for breathing.
- (E) Upper airways are resistant to colds and allergies.
- (F) There is a drop in the volume of air that is exchanged.
- (G) Automatic and voluntary respiratory systems are both involved.

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **B**。以 diaphragm 做关键词定位至第三句和第四句，说 rib cage 运动变少，使得 diaphragm 更重要，但 stomach 的压力使得 diaphragm 工作起来更困难，B 是正确答案。A 的 increased movement of the rib cage 和 C 的需要 pressure 都与原文相反；D 说 diaphragm contributes to 原文没有说。
2. 选 **A**。EXCEPT 题，排除法。A 的 centered in brain stem 做关键词定位至第一句，但原文说这个特点是属于 automatic, metabolic system 的，而 voluntary 的 center 是在 forebrain，所以 A 错，选；B 的 a number of activities 做关键词定位至倒数第二句的一大堆活动，B 正确，不选；C 的 bypass the automatic system 和 D 的 irregular breathing pattern 做关键词都定位至最后一句，都正确，不选。
3. 选 **D**。exclusive 仅有的、排他的，答案是 sole。
4. 选 **B**。此题关键词难找，可以顺序向下看，也可以用排除法。如果顺序向下看的话，会看到第一点说的是当 sleeper 在睡与醒之间摇摆的时候，发生了呼吸 cessation，也就是 stop，所以正确答案是 B，stop for a short time。C 和 D 一个说氧上升一个说二氧化碳下降，是一回事，都不是在睡觉期间发生的，所以都反了，而且两个一样的也都不选，A 没说。
5. 选 **C**。修辞题目的题，先看修辞点所在的句子，但原句整个都是一个例子，往前看。前一句仍然在说肌肉 relax 的事情，因此也是例子，所以看开头，开头说 air passage 在睡觉期间变了很多，紧接着就解释睡觉期间呼吸很难，也就是开头所指的变化是睡觉的时候呼吸变难，所以正确答案是 C。A 的 refute 与原文相反；B 的比较和 D 的 prevent blockage 原文都没说。
6. 选 **C**。EXCEPT 题，排除法。A 的 relaxation of the muscles 做关键词定位至第三句，正确，不选；B 的 two sides of the nose 做关键词定位至倒数第三句，正确，不选；C 的 upper airway 做关键词定位至第三句，但答案的 easier airflow 原文完全没说，C 错，选；D 的 complex muscle interaction 定位至最后一句，正确，不选。
7. 选 **B**。以 inhaling is difficult 做关键词定位至第二句，但这句只说了 difficult 的事儿，没说发生了什么，往下看。下句说 NREM 期间什么 adjustment 都没有，只有在 inadequate breaths 之后才 adjust，所以答案是 B。A 是 wakeful 时候才有的；C 的因果关系原文没说；D 完全没说。
8. 选 **D**。以 irritation 做关键词定位至最后一句，说如果 irritation 太严重，睡着的人就会醒，按照正常的叙述顺序应该是先叙述 mild 的情况，前一句果然在说 coughing reflex 没产生 cough，而产生了 cessation of breathing，呼吸停止的状况，所以答案是 D。C 与原文相反；B 是 severe 的时候才有的，A 没说。
9. 选 **A**。considerable 相当的，答案 significant。
10. 选 **D**。resume 恢复，所以正确答案是 restart。
11. 选 **A**。原句的结构是 exchange lower 是因为 blabla，所以正确答案是 A，因果关系和结构都正确。其他答案都没提到 exchange lower 这个主干，而且 B 把原文非主干的部分变成了主干；C 结果搞乱；D 逻辑关系错。
12. 选 **C**。两个过渡点，名词 respiration 和连词 however。根据 respiration 可以初步确定答案是 B 或者 C，但根据 however 断定 B 不对，因为两个 however 不能连续出现，所以正确答案是 C。
13. Wakefulness 选 **AG**，Sleep 选 **BDF**。A 选项对应第一段第三句，属于 wakeful 部分；B 选项对应第五段第四句，二氧化碳多氧少，属于 sleep 部分；C 选项原文没说 reflex 复杂，不属于任何一列，不选；D 选项对应原文第四段第三句，属于 sleep 部分；E 选项原文没说，不选；F 选项对应原文第六段第二句，属于 sleep 部分；G 选项对应原文第二段首句，属于 wakeful 部分。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Moving into Pueblos**

In the Mesa Verde area of the ancient North American Southwest, living patterns changed in the thirteenth century, with large numbers of people moving into large communal dwellings called pueblos, often constructed at the edges of canyons, especially on the sides of cliffs. Abandoning small extended-family households to move into these large pueblos with dozens if not hundreds of other people was probably **traumatic**. Few of the cultural traditions and rules that today allow us to deal with dense populations existed for these people accustomed to household autonomy and the ability to move around the landscape almost at will. ■ And besides the awkwardness of having to share walls with neighbors, living in aggregated pueblos introduced other problems. ■ For people in cliff dwellings, hauling water, wood, and food to their homes was a major chore. ■ The stress on local resources, especially in the firewood needed for daily cooking and warmth, was particularly **intense**, and conditions in aggregated pueblos were not very hygienic. ■

Given all the disadvantages of living in aggregated towns, why did people in the thirteenth century move into these closely packed quarters? For transitions of such suddenness, archaeologists consider either pull factors (benefits that drew families together) or push factors (some external threat or crisis that forced people to aggregate). In this case, push explanations dominate.

Population growth is considered a particularly influential push. After several generations of population growth, people packed the landscape in densities so high that communal pueblos may have been a necessary outcome. Around Sand Canyon, for example, populations grew from 5–12 people per square kilometer in the tenth century to as many as 30–50 by the 1200s. As densities increased, domestic architecture became larger, culminating in crowded pueblos. **Some scholars expand on this idea by emphasizing a corresponding need for arable land to feed growing numbers of people: construction of small dams, reservoirs, terraces, and field houses indicates that farmers were intensifying their efforts during the 1200s.** Competition for good farmland may also have prompted people to bond together to assert rights over the best fields.

Another important push was the onset of the Little Ice Age, a climatic phenomenon that led to cooler temperatures in the Northern Hemisphere. Although the height of the Little Ice Age was still around the corner, some evidence suggests that temperatures were falling during the thirteenth century. The environmental changes associated with this **transition** are not fully understood, but people living closest to the San Juan Mountains, to the northeast of Mesa Verde, were affected first. **Growing food at these elevations is always difficult because of the short growing season.** As the Little Ice Age progressed, farmers probably moved their fields to lower elevations, infringing on the lands of other farmers and pushing people together, thus contributing to the aggregations. Archaeologists identify a corresponding shift in populations toward the south and west toward Mesa Verde and away from higher elevations.

In the face of all these pushes, people in the Mesa Verde area had yet another reason to move into communal villages: the need for greater cooperation. Sharing and cooperation were almost certainly part of early Puebloan life, even for people living in largely independent single-household residences scattered across the landscape. Archaeologists find that even the most isolated residences during the eleventh and twelfth centuries obtained some pottery, and probably food, from some distance away, while major ceremonial events were opportunities for sharing food and crafts. Scholars believe that this cooperation allowed people to contend with a patchy environment in which precipitation and other resources varied across the landscape: if you produce a lot of food one year, you might trade it for pottery made by a distant ally who is having difficulty with crops—and the next year, the flow of goods might go in the opposite direction. But all of this appears to have changed thirteenth century. Although the climate remained as unpredictable as ever between one year and the next, it became much less locally diverse. In a bad year for farming, everyone was equally affected. No longer was it helpful to share widely. Instead, the most sensible thing would be for neighbors to combine efforts to produce as much food as possible, and thus aggregated towns were a sensible arrangement.

1. The word **“traumatic”** meaning to
  - (A) essential
  - (B) highly stressful
  - (C) highly unusual
  - (D) unwise
2. The word **“intense”** in the passage is closest in meaning to
  - (A) strong
  - (B) questionable
  - (C) obvious
  - (D) deliberate
3. According to paragraph 1, before the thirteenth century the people of southwestern North America lived in households that
  - (A) shared daily chores with neighboring households
  - (B) occupied dwellings that were built into the sides of cliffs
  - (C) were largely free to conduct their lives as they pleased
  - (D) enforced common standards of behavior and cooperative conduct within their communities
4. Which of the following best indicates the organization of paragraph 1?
  - (A) It presents the conditions that caused a change in a population’s living patterns and then explains why those conditions got worse.
  - (B) It identifies certain present-day cultural traditions and rules and then traces them to their roots in the thirteenth century.
  - (C) It casts doubt on one explanation of the move to pueblos and then introduces an alternative explanation that the passage will defend.
  - (D) It describes a major change in a population’s living patterns and then presents a number of problems that resulted from that change.
5. According to paragraph 3, which of the following was one of the consequences of increasing population densities?
  - (A) People were increasingly crowded into collections of large housing units.
  - (B) People stopped planting crops that have relatively low yields.
  - (C) Domestic buildings were pushed beyond the canyon limits.
  - (D) The natural landscape was destroyed.
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Some scholars even claim that the intensification of farmers’ various efforts during the 1200s led to further population growth and the consequent need for more arable land.
  - (B) Evidence of intensifying agriculture in the 1200s indicates a need to feed a larger population and so extends the argument that a growing population was the cause of the move to pueblos.
  - (C) During the 1200s, farmers met the demand for more arable land, but they also succeeded in cultivating existing land more intensively with the help of agricultural construction projects.
  - (D) Some scholars feel strongly that the construction of small dams, reservoirs, terraces, and field houses in the thirteenth century is independent evidence for growth in the number of people.
7. The word **“transition”** in the passage is closest in meaning to
  - (A) change
  - (B) climate
  - (C) decline
  - (D) problem
8. Why does the author state that **“Growing food at these elevations is always difficult because of the short growing season.”**?
  - (A) To explain why the higher elevations were always relatively sparsely populated
  - (B) To suggest that any worsening of conditions would have significant consequences
  - (C) To emphasize how resourceful the people growing food at these elevations were
  - (D) To argue that farming was not the primary source of food at high elevations

9. According to paragraph 4, what did farmers do in response to falling temperatures during the Little Ice Age?
- (A) Moved to areas away from Mesa Verde
  - (B) Moved closer to the northeastern part of Mesa Verde
  - (C) Began to cultivate crops adapted to a short growing season
  - (D) Gave up the cultivation of the highest-lying lands
10. According to paragraph 5, major ceremonial events were occasions for
- (A) leaders to persuade people from the countryside to move into a pueblo
  - (B) farmers to collect information about where crops could be reliably grown
  - (C) people to develop better techniques for producing pottery and crafts
  - (D) people in the early Puebloan era to share farm and craft products
11. According to paragraph 5, which of the following was a reason people in the Mesa Verde area formed communal villages in the thirteenth century?
- (A) The climate in the Mesa Verde area became more locally diverse.
  - (B) Individuals were no longer interested in exchanging pottery and food.
  - (C) Cooperation between people became more important for survival.
  - (D) Bad years of farming began to occur more frequently.
12. Paragraph 5 supports which of the following statements about cooperation among the people in the Mesa Verde area from the eleventh through the thirteenth century?
- (A) Cooperation allowed many households to give up farming and to specialize in making pottery and crafts.
  - (B) People went from exchanging food and crafts they individually produced to sharing in a cooperative effort to produce as much food as possible.
  - (C) Overtime there was less cooperation as farmers competed with each other for trade with distant areas.
  - (D) Individuals stopped cooperating with each other because they did not have enough food for themselves.
13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Performing everyday household tasks required more effort.

Where would the sentence best fit?

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

In the thirteenth century, the people in the Mesa Verde area went from living in scattered independent households to living in large pueblos.

Answer choices

- (A) Because the thirteenth-century inhabitants of the Mesa Verde area did not have the cultural expectations of today's city dwellers, they easily adapted to communal life.
- (B) Even though living in pueblos had disadvantages, the population of the area had grown so large that there may have been no other arrangement that would have met its needs.
- (C) From the eleventh century onward, farmers began to increase food production on existing farmland and started bringing more land under cultivation.
- (D) A development that contributed to increasing population densities was a cooling climate that led many people to leave the coldest areas and crowd into climatically more favorable areas.
- (E) The primary reason for moving to pueblos was the social benefits associated with communal life.
- (F) People were brought together by the need to produce food cooperatively, as the use of food surpluses in one place to relieve shortages in another ended due to a change in climate.

## 参考答案与解析

1. 选 **B**。traumatic 外伤的，答案 highly stressful。
2. 选 **A**。intense 强烈的，正确答案是 strong。
3. 选 **C**。如果这道题以十三世纪做关键词的话，读完第一句也不知道选哪个，因此用排除法较好。A 的 chore 做关键词定位至倒数第二句，但原文只是列举了 chore，没说选项说的 share，A 错；B 的 dwelling 和 sides of the cliffs 做关键词定位至第一句，但建在 cliff 的是 pueblo，不是十三世纪之前，所以 B 错；C 在原文中没有明确说明，但看首句会发现十三世纪变化了，十三世纪以后大家一起住，有很多问题，也就是说十三世纪之前大家都是自己住自己的，也就是 C 说的 conduct their lives as they pleased，C 正确；D 原文完全没说，不选。
4. 选 **D**。问全段的题，看头尾。第一句说十三世纪人们的生活方式发生了变化，很多人都搬到了 pueblo；而后半段从倒数第三句到最后都在说这种现象产生的一系列问题，所以是先陈述现象，后说这种现象产生的问题，答案是 D。
5. 选 **A**。以 density 做关键词定位至第二句，说过若干代人口增长，density 实在太大，使得 pueblo 成为一个不可避免的结果，所以正确答案是 A。B 的 crop，C 的 canyon limits 和 D 的 destroy 原文都没讲。
6. 选 **B**。原文的结构是 scholar 强调需要耕地来保证增长人口的食物，construction indicates。答案是 B，A 的 effort lead to 人口增长纯属胡说；C 的转折完全不对，而且 farmer 满足耕地需要也不对；D 的 independent evidence 不对。
7. 选 **A**。transition 过渡，所以答案是 change。
8. 选 **B**。修辞题目的题，修辞点所在的句子仅仅是一个例子，所以往前看，但前一句仍然是例子，所以看首句。首句说 Little Ice Age 对 push 有影响，而选项中提到影响的只有 B 的 consequence，所以正确答案是 B，而且最后一句话说人口迁徙也可以说明 Little Ice Age 的影响。A 的 sparsely populated，C 的 resourceful 和 D 的 primary source of food 原文都没有任何相关信息。
9. 选 **D**。本段第一句说 cooler temperature，最后一句说从 south and west toward MESA，离开了高地，所以正确答案是 D，放弃了高地。A 说反；B 错在不是 MESA 的东北部，而是朝向 MESA；C 的 crop 原文没说。
10. 选 **D**。以 major ceremonial events 做关键词定位至第三句的最后半句，说 ceremonial event 提供了 share food 和 crafts 的机会，所以正确答案是 D，其他都完全不靠谱。
11. 选 **C**。以 thirteenth century 做关键词定位至倒数第四句，说一切都在十三世纪发生了变化，接着所有的内容都在说十三世纪变化之后的事。最后一句特别指出最有效的方式是 neighbor 联合生产更多食物，因此 aggregated town 成为最好的 arrangement，所以形成 communal village 的原因是 C。A 说反；B 和 D 没说。
12. 选 **B**。此题不用回原文定位，因为题目问的是十一世纪到十三世纪 MESA 人的 cooperation 怎么变的，而上题已经说了十三世纪人们合作，也就是以前是不怎么合作的，四个答案中只有 B 说到了合作生产更多食物，所以 B 是正确答案。
13. 选 **B**。两个过渡点，分别是名词 everyday household tasks 和名词 more effort，根据名词 everyday household tasks 可以确定 B 或者 C 是答案，因为原文的 hauling water, wood, and food 是 everyday household tasks 的同义词；而 require more effort 跟 B 插入点前的 problem 对应，可以确定答案是 A 或者 B，综上，正确答案是 B。
14. 选 **BDF**。A 选项与原文第一段第二句说反，原文说 traumatic，也就是不容易适应城镇生活，而答案说容易适应，不选；B 选项正确，因为第一段最后一句说到了城镇居住的缺点，对应选项的前半句，而第五段最后说到了城镇居住是最 sensible 的 arrangement，所以这个答案正确；C 选项与原文第四段最后一句相反，原文说放弃了原来的 high elevation，而不是选项说的开垦更多土地，所以不选；D 选项对应原文第四段第一句和最后一句，正确；E 选项不对，作者也没明确说哪个是首要原因，就算按顺序，第三段首句先说的也是 population growth，不是 benefit，所以不选；F 选项对应原文第五段的倒数四句，正确。

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错误： 个

## The Surface of Mars

The surface of Mars shows a wide range of geologic features, including huge volcanoes—the largest known in the solar system—and extensive impact cratering. Three very large volcanoes are found on the Tharsis bulge, an enormous geologic area near Mars's equator. Northwest of Tharsis is the largest volcano of all: Olympus Mons, with a height of 25 kilometers and measuring some 700 kilometers in diameter at its base. The three large volcanoes on the Tharsis bulge are a little smaller—a “mere” 18 kilometers high.

None of these volcanoes was formed as a result of collisions between plates of the Martian crust—there is no plate motion on Mars. Instead, they are shield volcanoes—volcanoes with broad, sloping slides formed by molten rock. All four show distinctive lava channels and other flow features similar to those found on shield volcanoes on Earth. Images of the Martian surface reveal many hundreds of volcanoes. Most of the largest volcanoes are associated with the Tharsis bulge, but many smaller ones are found in the northern plains.

The great height of Martian volcanoes is a direct consequence of the planet's low surface gravity. As lava flows and spreads to form a shield volcano, the volcano's eventual height depends on the new mountain's ability to support its own weight. The lower the gravity, the lesser the weight and the greater the height of the mountain. It is no accident that Maxwell Mons on Venus and the Hawaiian shield volcanoes on Earth rise to about the same height (about 10 kilometers) above their respective bases—Earth and Venus have similar surface gravity. Mars's surface gravity is only 40 percent that of Earth, so volcanoes rise roughly 2.5 times as high. Are the Martian shield volcanoes still active? **Scientists have no direct evidence for recent or ongoing eruptions, but if these volcanoes were active as recently as 100 million years ago (an estimate of the time of last eruption based on the extent of impact cratering on their slopes), some of them may still be at least intermittently active.** Millions of years, though, may pass between eruptions.

Another prominent feature of Mars's surface is cratering. The Mariner spacecraft found that the surface of Mars, as well as that of its two moons, is pitted with impact craters formed by meteoroids falling in from space. As on our Moon, the smaller craters are often filled with surface matter—mostly dust—confirming that Mars is a dry desert world. However, Martian craters get filled in considerably faster than their lunar counterparts. On the Moon, ancient craters less than 100 meters across (corresponding to depths of about 20 meters) have been obliterated, primarily by meteoritic erosion. On Mars, there are relatively few craters less than 5 kilometers in diameter. The Martian atmosphere is an efficient erosive agent, with Martian winds transporting dust from place to place and erasing surface features much faster than meteoritic impacts alone can obliterate them.

As on the Moon, the extent of large impact cratering (i.e. craters too big to have been filled in by erosion since they were formed) serves as an age indicator for the Martian surface. Age estimates ranging from four billion years for Mars's southern highlands to a few hundred million years in the youngest volcanic areas were obtained in this way.

The detailed appearance of Martian impact craters provides an important piece of information about conditions just below the planet's surface. Martian craters are surrounded by ejecta (debris formed as a result of an impact) that looks quite different from its lunar counterparts. A comparison of the Copernicus crater on the Moon with the (fairly typical) crater Yuty on Mars demonstrates the differences. The ejecta surrounding the lunar crater is just what one would expect from an explosion ejecting a large volume of dust, soil, and boulders. ■ However, the ejecta on Mars gives the distinct impression of a liquid that has splashed or flowed out of crater. ■ Geologists think that this fluidized ejecta crater indicates that a layer of permafrost, or water ice, lies just a few meters under the surface. ■ Explosive impacts heated and liquefied the ice, resulting in the fluid appearance of the ejecta. ■

1. The word **"enormous"** in the passage is closest in meaning to
  - (A) important
  - (B) extremely large
  - (C) highly unusual
  - (D) active
2. According to paragraph 1, Olympus Mons differs from volcanoes on the Tharsis bulge in that Olympus Mons
  - (A) Has more complex geologic features
  - (B) Shows less impact cratering
  - (C) Is taller
  - (D) Was formed at a later time
3. The word **"distinctive"** in the passage is closest in meaning to
  - (A) deep
  - (B) complex
  - (C) characteristic
  - (D) ancient
4. According to paragraphs 1 and 2, which of the following is NOT true of the shield volcanoes on the Tharsis bulge?
  - (A) They have broad, sloping sides.
  - (B) They are smaller than the largest volcano on Mars.
  - (C) They have channels that resemble the lava channels of volcanoes on Earth.
  - (D) They are over 25 kilometers tall.
5. The word **"roughly"** in the passage is closest in meaning to
  - (A) typically
  - (B) frequently
  - (C) actually
  - (D) approximately
6. In paragraph 3, why does the author compare Maxwell Mons on Venus to the Hawaiian shield volcanoes on Earth?
  - (A) To help explain the relationship between surface gravity and volcano height
  - (B) To explain why Mars's surface gravity is only 40 percent of Earth's
  - (C) To point out differences between the surface gravity of Earth and the surface gravity of Venus
  - (D) To argue that there are more similarities than differences between volcanoes on different planets
7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Although direct evidence of recent eruptions is lacking, scientists believe that these volcanoes were active as recently as 100 million years ago.
  - (B) Scientists estimate that volcanoes active more recently than 100 years ago will still have extensive impact cratering on their slopes.
  - (C) If, as some evidence suggests, these volcanoes erupted as recently as 100 million years ago, they may continue to be intermittently active.
  - (D) Although these volcanoes were active as recently as 100 million years ago, there is no direct evidence of recent or ongoing eruptions.
8. The word **"considerably"** in the passage is closest in meaning to
  - (A) frequently
  - (B) significantly
  - (C) clearly
  - (D) surprisingly
9. According to paragraph 4, what is demonstrated by the fact that craters fill in much faster on Mars than on the Moon?
  - (A) Erosion from meteoritic impacts takes place more quickly on Mars than on the Moon.

- (B) There is more dust on Mars than on the Moon.
- (C) The surface of Mars is a dry desert.
- (D) Wind is a powerful eroding force on Mars.

**10. In paragraph 4, why does the author point out that Mars has few ancient craters that are less than 5 kilometers in diameter?**

- (A) To explain why scientists believe that the surface matter filling Martian craters is mostly dust
- (B) To explain why scientists believe that the impact craters on Mars were created by meteoroids
- (C) To support the claim that the Martian atmosphere is an efficient erosive agent
- (D) To argue that Mars experienced fewer ancient impacts than the Moon did

**11. According to paragraph 5, what have scientists been able to determine from studies of large impact cratering on Mars?**

- (A) Some Martian volcanoes are much older than was once thought.
- (B) The age of Mars's surface can vary from area to area.
- (C) Large impact craters are not reliable indicators of age in areas with high volcanic activity.
- (D) Some areas of the Martian surface appear to be older than they actually are.

**12. According to paragraph 6, the ejecta of Mars's crater Yuty differs from the ejecta of the Moon's Copernicus crater in that the ejecta of the Yuty crater**

- (A) Has now become part of a permafrost layer
- (B) Contains a large volume of dust, soil and boulders
- (C) Suggests that liquid once came out of the surface at the crater site
- (D) Was thrown a comparatively long distance from the center of the crater

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This surface feature has led to speculation about what may lie under Mars's surface.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Volcanoes and impact craters are major features of Martian geology.

**Answer choices**

- (A) Plate motion on Mars, once considered to have played no role in shaping the planet's surface, is now seen as being directly associated with the planet's earliest volcanoes.
- (B) Mars has shield volcanoes, some of which are extremely tall because of the planet's low surface gravity.
- (C) Although the erosive power of the Martian atmosphere ensures that Mars has fewer craters than the Moon does, impact craters are prominent on Mars's surface.
- (D) Scientists cannot yet reliably estimate the age of the Martian surface because there has been too much erosion of it.
- (E) Scientists have been surprised to discover that conditions just below the surface of Mars are very similar to conditions just below the surface of the Moon.
- (F) Studies of crater ejecta have revealed the possibility of a layer of permafrost below the surface of Mars.

**参考答案与解析**

1. 选 **B**。enormous 巨大的，选 extremely large。
2. 选 **C**。根据 The three large volcanoes on the Tharsis bulge are a little smaller 另外三小点，那个 OM 就是大点。
3. 选 **C**。distinctive 独特的，选 characteristic。
4. 选 **D**。问 shield volcanoes。特征：A 对应 volcanoes with broad, sloping slides formed by molten rock。B, Tharsis 是最大的，其他的都比它小。C 对应 All four show distinctive lava channels and other flow features similar to those found on shield volcanoes on Earth，因此选 D。
5. 选 **D**。roughly 粗糙地，选 approximately。
6. 选 **A**。目的题，找逻辑上一层，作者为何要做比较，无疑说明观点——火山最终高度取决于它能支撑的重量，而重力越小，高度越低。说明的是重力和高度之间的关系，选 A。
7. 选 **C**。原句包含两层重要语义：如果最近火山和一亿年前一样活跃、一些火山还是间歇性活跃的。
8. 选 **B**。considerably 相当可观的，significantly。
9. 选 **D**。最后给出解释：主要由于大气中含有腐蚀性成分，风吹起来腐蚀了地表要比陨星撞击来的快。
10. 选 **C**。为后面说 Martian atmosphere is an efficient erosive agent 做铺垫。
11. 选 **B**。they serves as an age indicator for the Martian surface 作为探测火星表面年龄的提示。Age estimates ranging from four billion years for Mars's southern highlands to a few hundred million years 估计出一个范围。
12. 选 **C**。火星上的喷出物是从火山口溢出的。
13. 选 **B**。给定句说表面特征会导致一个关于什么在火星表面下的推测，后面应该紧跟推测是什么。第二个空合理。
14. 选 **BCF**。目前暂无解析。

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## The Decline of Venetian Shipping

In the late thirteenth century, northern Italian cities such as Genoa, Florence, and Venice began an economic resurgence that made them into the most important economic centers of Europe. By the seventeenth century, however, other European powers had taken over, as the Italian cities lost much of their economic might.

This decline can be seen clearly in the changes that affected Venetian shipping and trade. First, Venice's intermediary functions in the Adriatic Sea, where it had dominated the business of shipping for other parties, were lost to direct trading. In the fifteenth century there was little problem recruiting sailors to row the galleys (large ships propelled by oars): guilds (business associations) were required to provide rowers, and through a draft system free citizens served compulsorily when called for. ■ In the early sixteenth century the shortage of rowers was not serious because the demand for galleys was limited by a move to round ships (round-hulled ships with more cargo space), which required fewer rowers. ■ But the shortage of crews proved to be a greater and greater problem, despite continuous appeal to Venice's tradition of maritime greatness. ■ Even though sailors' wages doubled among the northern Italian cities from 1550 to 1590, this did not elicit an increased supply. ■

The problem in shipping extended to the Arsenale, Venice's huge and powerful shipyard. Timber ran short, and it was necessary to procure it from farther and farther away. In ancient Roman times, the Italian peninsula had great forest of fir preferred for warships, but scarcity was apparent as early as the early fourteenth century. Arsenale officers first brought timber from the foothills of the Alps, then from north toward Trieste, and finally from across the Adriatic. Private shipbuilders were required to buy their oak abroad. As the costs of shipbuilding rose, Venice clung to its outdated standard while the Dutch were innovation in the lighter and more easily handled ships.

The step from buying foreign timber to buying foreign ships was regarded as a short one, especially when complaints were heard in the latter sixteenth century that the standards and traditions of the Arsenale were running down. Work was stretched out and done poorly. Older workers had been allowed to stop work a half hour before the regular time, and in 1601 younger workers left with them. Merchants complained that the privileges reserved for Venetian-built and owned ships were first extended to those Venetians who bought ships from abroad and then to foreign-built and owned vessels. **Historian Frederic Lane observes that after the loss of ships in battle in the late sixteenth century, the shipbuilding industry no longer had the capacity to recover that it had displayed at the start of the century.**

The conventional explanation for the loss of Venetian dominance in trade is establishment of the Portuguese direct sea route to the East, replacing the overland Silk Road from the Black sea and the highly profitable Indian Ocean-caravan-eastern Mediterranean route to Venice. The Portuguese Vasco da Gama's Voyage around southern Africa to India took place at the end of the fifteenth century, and by 1502 the trans- Arabian caravan route had been cut off by political unrest.

The Venetian Council finally allowed round ships to enter the trade that was previously reserved for merchant galleys, thus reducing transport cost by one third. Prices of spices delivered by ship from the eastern Mediterranean came to equal those of spices transported by Portuguese vessels, but the increase in quantity with both routes in operation drove the price far down. Gradually, Venice's role as a storage and distribution center for spices and silk, dyes, cotton, and gold decayed, and by the early seventeenth century Venice had lost its monopoly in markets such as France and southern Germany.

Venetian shipping had started to decline from about 1530—before the entry into the Mediterranean of large volumes of Dutch and British shipping—and was clearly outclassed by the end of the century. A contemporary of Shakespeare (1564–1616) observed that the productivity of Italian shipping had declined, compared with that of the British, because of conservatism and loss of expertise. Moreover, Italian sailors were deserting and emigrating, and captains, no longer recruited from the ranks of nobles, were weak on navigations.

1. The word “**resurgence**” in the passage is closest in meaning to
  - (A) transformation
  - (B) comeback
  - (C) program
  - (D) expansion
2. The word “**compulsorily**” in the passage is closest in meaning to
  - (A) for free
  - (B) for a time
  - (C) by requirement
  - (D) by design
3. According to paragraph 2, which of the following contributed to the decline of Venetian shipping?
  - (A) The loss of trade in Adriatic Sea
  - (B) The move from galleys to round ships
  - (C) The decreased demand for galleys
  - (D) The doubling of sailor’s wages
4. All of the following are mentioned in paragraph 2 as ways that Venice provided rowers for its galley EXCEPT
  - (A) Requiring business associations to provide sailors
  - (B) Recruiting sailors from other cities in northern Italy
  - (C) Drafting Venetian citizens into services as rowers
  - (D) Appealing to the traditions of Venice as a sea power
5. The word “**outdated**” in the passage is closest in meaning to
  - (A) strict
  - (B) enforced
  - (C) improved
  - (D) old-fashioned
6. According to paragraphs 3, why did the building of ships in Venetian shipyards become increasingly expensive?
  - (A) The wages of officers and workers in the Arsenale kept rising.
  - (B) Roman shipyards were using all the available fir trees for the warships.
  - (C) The timber used in the shipbuilding had to be brought from farther and farther away.
  - (D) Venetian standards required that shipbuilders use top-quality materials.
7. All of the following are mentioned in paragraph 3 and 4 as contributing to the problems of the Venetian shipbuilding industry at the end of the sixteenth century EXCEPT
  - (A) The quality of work performed in the Arsenale had declined
  - (B) Venetian-built ships were heavy and generally inefficient
  - (C) Arsenale shipbuilders worked more slowly
  - (D) Only a few merchants controlled the buying and selling of most of the Venetian-built ships
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The loss of ships in battle at the end of the sixteenth century showed that Venetian shipbuilders lacked the skills they had possessed at the beginning of the century.
  - (B) Venetian shipbuilding failed to quickly replace the ships lost in battle at the end of the sixteenth century as it would have done earlier in the century.
  - (C) Frederic Lane noted that Venice lost ships in battle at the end of the sixteenth century, showing that Venetian shipbuilding was no longer known for its reliability.
  - (D) Venetian shipbuilding had been known for its high quality of work at the beginning of the sixteenth century, but toward the end of the century Venetian ships were poorer in quality.
9. The word “**conventional**” in the passage is closest in meaning to
  - (A) informal
  - (B) logical

- (C) correct
- (D) usual

**10. Why does the author mention “Vasco da Gama’s Voyage around southern Africa to India” in the passage?**

- (A) to indicate how the Portuguese came to challenge Venetian dominance of trade with the East
- (B) to explain why political troubles resulted in the closing of the usual routes to India
- (C) to prove that Venetians could not sail round ships as efficiently as sailors from other countries did
- (D) to show that Venetian reliance on round ships rather than galleys proved to be weakness

**11. Which of the following can be inferred from paragraph 6 about the Venetian Council’s decision concerning the use of round ships?**

- (A) It resulted in a return to profitable in luxury goods for Venetian merchants.
- (B) Ultimately it did not restore the superiority in the spice trade that Venice had enjoyed earlier.
- (C) It eventually enabled Venetian merchants to increase the quantity and price of the spices they sold in Europe.
- (D) It means a long-awaited improvement in the fortunes of the shipbuilding industry in Venice.

**12. According to paragraphs 6, in the sixteenth century the price of spices declined because**

- (A) France and Germany established monopolies and dictated prices
- (B) Venetian merchant galleys competed with Venetian round ships for the spice trade
- (C) More spices were available because both the Venetians and the Portuguese were importing them
- (D) Increased demand for silk, dyes, cotton and gold meant that people had less money to spend on spices

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The increase in reward still did not attract young people to this hard life, and convicted criminals and slaves were pressed into services.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The loss of power and prestige of Italian cities by the sixteenth century is clearly seen in the decline of Venetian shipping.

**Answer choices**

- (A) Venetian ships were famous for carrying large cargoes of spices and luxury goods around the world in fast, oar-driven galleys.
- (B) A shortage of timber for building the traditional galleys and a lack of sailors to row them meant a loss of Venetian shipping business.
- (C) The Venetian Council made sure that Venetian-built and –owned ships kept special privileges in transporting luxury goods in and out of Venice.
- (D) Venetian round ships bringing spices and silk from the East helped drive prices down so that ordinary people could afford to buy them.
- (E) Venice failed to keep up with improvement in ship design, and the cost of shipbuilding rose as quality and efficiency declined.
- (F) The Portuguese direct sea route to the East adversely affected Venetian trade, and Venice fell behind the Dutch and the British in the quality of their ships and sailing skills.

**参考答案与解析**

1. 选 **B**。resurgence 复苏，选 comeback。
2. 选 **C**。compulsorily 强制地，选 C。
3. 选 **A**。问什么导致 Venetian shipping 的下降，定位段落首句，后面给出解释。
4. 选 **B**。A 对应 guilds (business associations) were required to provide rowers; C 对应 and through a draft system free citizens served compulsorily when called for; D 对应 despite continuous appeal to Venice's tradition of maritime greatness。
5. 选 **D**。outdated 过时的，选 D。
6. 选 **C**。问什么导致了造船变贵，主要原因是木材短缺。
7. 选 **D**。AC 对应 4 段 Work was stretched out and done poorly，工作延长，做的不好；B 对应 3 段 Venice clung to its outdated standard while the Dutch were innovation in the lighter and more easily handled ships，V 还坚持过去的标准而 D 有创新。
8. 选 **B**。目前暂无解析。
9. 选 **D**。conventional 传统的、习惯的，选 D
10. 选 **A**。目的题，为何提到 Vasco，往前看，Venetian 失去主导力是因为葡萄牙的航线，后面用 Vasco 来举例说明该问题。
11. 选 **B**。最终 Venice 失去了垄断，B 同义改写。C 选项 price 没有升高。
12. 选 **C**。问香料价格下降的原因，是两条航线带来的香料在数量上的增加导致的。
13. 选 **D**。找到关于 The increase in reward 的语义即可，Even though sailors' wages doubled among the northern Italian cities from 1550 to 1590。薪水翻倍。
14. 选 **BEF**。A 未提及，不选；B 是 3 段主要内容；C 为 4 段细节，不选；D 文中没有说普通人买得起；E 为 3 段主要内容；F 综合 5 段和 7 段内容。

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时：     分     秒

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## The Evolutionary Origin of Plants

The evolutionary history of plants has been marked by a series of adaptations. The ancestors of plants were photosynthetic single-celled organisms that gave rise to plants presumably lacked true roots, stems, leaves, and complex reproductive structures such as flowers. All of these features appeared later in the evolutionary history of plants. Of today's different groups of algae, green algae are probably the most similar to ancestral plants. This supposition stems from the close phylogenetic (natural evolutionary) relationship between the two groups. DNA comparisons have shown that green algae are plants' closest living relatives. In addition, other lines of evidence support the hypothesis that land plants evolved from ancestral green algae used the same type of chlorophyll and accessory pigments in photosynthesis as do land plants. This would not be true of red and brown algae. Green algae store food as starch, as do land plants and have cell walls made of cellulose, similar in composition to those of land plants. Again, the good storage and cell wall molecules of red and brown algae are different.

Today green algae live mainly in freshwater, suggesting that their early evolutionary history may have occurred in freshwater habitats. If so, the green algae would have been subjected to environmental pressures that resulted in adaptations that enhanced their potential to give rise to land-dwelling organisms.

■ The environmental conditions of freshwater habitats, unlike those of ocean habitats, are highly variable. ■ Water temperature can fluctuate seasonally or even daily and changing level of rainfall can lead to fluctuations in the concentration of chemical in the water or even to period in which the aquatic habitat dries up. ■ Ancient fresh water green algae must have evolved features that enable them to withstand extremes of temperature and periods of dryness. ■ These adaptations served their descendant well as they invaded land.

The terrestrial world is green now, but it did not start out that way. When plants first made the transition ashore more than 400 million years ago, the land was barren and desolate, inhospitable to life. **From a plant's evolutionary view point, however, it was also a land of opportunity, free of competitors and predators and full of carbon dioxide and sunlight (the raw materials for photosynthesis, which are present in far higher concentrations in air than in water).** So once natural selection had shaped the adaptations that helped plants overcome the obstacles to terrestrial living, plants prospered and diversified.

When plants pioneered the land, they faced a range of challenges posed by terrestrial environments. On land, the supportive buoyancy of water is missing, the plant is no longer bathed in a nutrient solution, and air tends to dry things out. These conditions favored the evolution of the structures that support the body, vessels that transport water and nutrients to all parts of plant, and structures that conserve water. The resulting adaptations to dry land include some structural features that arose early in plant evolution; now these features are common to virtually all land plant. They include roots or root like structures, a waxy cuticle that covers the surfaces of leaves and stems and limits the evaporation of water, and pores called stomata in leaves and stems that allow gas exchange but close when water is scarce, thus reducing water loss. Other adaptations occurred later in the transition to terrestrial life and now wide spread but not universal among plants. These include conducting vessels that transport water and minerals upward from the roots and that move the photosynthetic products from the leaves to the rest of the plant body and the stiffening substance lignin, which support the plant body, helping it expose maximum surface area to sunlight.

These adaptations allowed an increasing diversity of plant forms to exploit dry land. Life on land, however, also required new methods of transporting sperm to eggs. Unlike aquatic and marine forms, land plants cannot always rely on water currents to carry their sex cells and disperse their fertilized eggs. So the most successful groups of land plants are those that evolved methods of fertilized sex cell dispersal that are independent of water and structures that protect developing embryos from drying out. Protected embryos and waterless dispersal of sex cells were achieved with the origin of seed plants and the key evolutionary innovations that they introduced: pollen, seeds, and later, flowers and fruits.

1. The word “presumably” in the passage is closest in meaning to
  - (A) originally
  - (B) supposedly
  - (C) obviously
  - (D) usually
2. According to paragraph 1, all of the following are true of ancestral plants EXCEPT
  - (A) They had cellulose-based cell walls
  - (B) They were closely related to green algae
  - (C) They were able to store nutrients
  - (D) They had a sophisticated multicellular structure
3. The phrase “subjected to” in the passage is closest in meaning to
  - (A) restricted by
  - (B) distant from
  - (C) exposed to
  - (D) combined with
4. What can be inferred from paragraph 3 about ancient green algae?
  - (A) They lived in a generally wet environment that was sometimes dry.
  - (B) They adapted better to changes in water temperature than did to other changes in the environment.
  - (C) They inhabited areas that were close to the ocean.
  - (D) They had lived primarily on land.
5. The word “desolate” in the passage is closest in meaning to
  - (A) dusty
  - (B) hardened
  - (C) deserted
  - (D) dried out
6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Terrestrial plants had the advantages of not having rivals and having easy access to photosynthetic material.
  - (B) The abundance of photosynthetic material made life on land easier for pioneering plants.
  - (C) Once plants had eliminated their competitors and their predators, their evolutionary process proceeded smoothly.
  - (D) Plant evolution eliminated competitors and made the process of photosynthesis more efficient.
7. According to paragraph 4, which of the following is true about the terrestrial world at the time it was colonized by plants?
  - (A) it was exposed to high levels of solar radiation
  - (B) it contained a limited supply of carbon dioxide
  - (C) it had developed 400 million years earlier
  - (D) it lacked the presence of any organisms
8. the word “posed” in the passage is closest in meaning to
  - (A) shared
  - (B) presented
  - (C) strengthened
  - (D) concealed
9. According to paragraph 5, all of the following are problems that early terrestrial plants had to overcome EXCEPT
  - (A) a tendency to become dry
  - (B) the inability to limit surface sunlight
  - (C) the absence of a structure to support the body of the plant
  - (D) the inability to transport water and minerals through the plant
10. What purpose does paragraph 5 serve in the larger discussion of the origins of terrestrial plants?

- (A) To emphasize how long it took for ancestral plants to adjust to life on land
- (B) To disprove the argument that land plants adapted easily to their new terrestrial environment
- (C) To explain how plant colonization changed the physical environment of the terrestrial world
- (D) To describe how ancestral plants solved the problems they confirmed in colonizing

**11. According to Paragraph 6, the adaptation made by terrestrial plants had which of the following effect?**

- (A) plants developed reproductive strategies usable in both land and water environment
- (B) the plant diversity achieved in water environments diminished on land
- (C) seed plants became the dominant species among plants
- (D) a greater range of plants was able to develop

**12. Which of the following best describes the author's presentation of the information about land plants?**

- (A) the author provided an overview of the evolutionary relationships between specific species of algae and land plants
- (B) The author discusses the transformation plants underwent in the process of changing from an aquatic to a terrestrial environment
- (C) the author establishes a pattern of similarity between major land and water plant groups
- (D) The author presents evidence to support the hypothesis that plants first fully evolved in water before finding their way to land

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Scientists believe that chemical changes and a thicker exterior, among other things, may have helped ancient algae overcome the conditions in their environment.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

In moving from water to land, ancestral plants overcame many obstacles in order to survive.

**Answer choices**

- (A) Neither brown nor red algae are likely to be ancestors of plants because of their difference in pigmentation.
- (B) The instability of freshwater habitats caused marine algae to develop adaptations to their harsh environment.
- (C) The colonization of land by plants was a major revolution in the history of Earth.
- (D) Terrestrial plants adjusted to life on land by undergoing structural changes that enabled them to support themselves, resist drying, and exchange gases.
- (E) To colonize new terrestrial habitats, plants needed to create a way of reproducing without water.
- (F) Once plants had overcome the challenges posed by terrestrial life, they prospered by becoming less diverse.

### 参考答案与解析

1. 选 **B**。presumably 假定得，选 supposedly。
2. 选 **D**。这道题可以直接做取非处理，the ancestors of plants were photosynthetic single-celled organisms，原文说都是单细胞，那么 D 选项说多细胞就不对了。
3. 选 **C**。subjected to 遭受、承受，答案是 exposed to，使遭受、面临着。
4. 选 **A**。推断题。A 选项正确，原文说水温变化会导致水中化学物质波动或者水中栖息地干涸；B 他们更能适应水中温度变化，原文中没有出现比较，不选；C 他们应该在 freshwater 而不是 ocean；D 说在他们主要在陆地存在，文中一直说在 freshwater habitat，错。
5. 选 **C**。desolate 荒凉的，选 deserted。
6. 选 **A**。原句包含两层概念：有很多机会，没有竞争；有 CO<sub>2</sub> 和日光，而这两个都是光合作用的物质。那么重复的时候，两个层面都要说到位。选 A。B 选项，没有比较。C 文中没提到消除竞争者就能演变得好。
7. 选 **D**。定位原文 the land was barren and desolate, inhospitable to life，陆地是贫瘠荒凉的，不适合生命的。选 D，缺少生物。
8. 选 **B**。posed 提出，选 present。
9. 选 **B**。5 段首先提出将面对各种挑战，下面一一列举：A 对应 air tends to dry things out. These conditions favored the evolution of the structures that support the body, vessels that transport water and nutrients to all parts of plant, and structures that conserve water，说了这些情况导致了结构的变化反过来说，之前是不能支持 C 选项的 body、D 选项的 vessel 不可以运输水和营养。
10. 选 **D**。段落开头就说了植物到土地上，会面临各种挑战，后面解释了他们身体构造如何变化使得适合生存在陆地。D 合理。
11. 选 **D**。适应性变化导致繁殖需要新方法，既而植物得以发展。选 D。A，繁殖策略水中和陆地不同 B，没说陆地上多样性减少，C 原文没说种子类植物是主要物种。
12. 选 **B**。看题目中的 land plants，定位到原文第二句话和第三句，从而选择 B。
13. 选 **D**。需要插入的句子意思是：科学家认为化学变化以及更厚的表层可能帮助了远古藻类克服环境的恶劣条件。A 和 B 均未提及远古藻类，而是主要集中讨论生物的环境变化非常多样；C 之后开始提及远古淡水绿藻进化出抵御恶劣环境的特征。需要插入的句子正好是对这些特征的举例说明，故应该插入最后一个空 D。
14. 选 **BDF**。A 是第一段的细节，不选；B 正确，为第三段主要内容，不稳定淡水栖息地导致了藻类的变化去适应环境；C 未提及；D 正确，对应倒数第二段陆地植物的适应性变化；E 正确，对应最后一段内容，关于繁殖的新方法；F 没提。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



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**Energy and the Industrial Revolution**

For years historians have sought to identify crucial elements in the eighteenth-century rise in industry, technology, and economic power known as the Industrial Revolution, and many give prominence to the problem of energy. Until the eighteenth century, people relied on energy derived from plants as well as animal and human muscle to provide power. Increased efficiency in the use of water and wind helped with such tasks as pumping, milling, or sailing. However, by the eighteenth century, Great Britain in particular was experiencing an energy shortage. Wood, the primary source of heat for homes and industries and also used in the iron industry as processed charcoal, was diminishing in supply. Great Britain had large amounts of coal; however, there were not yet efficient means by which to produce mechanical energy or to power machinery. This was to occur with progress in the development of the steam engine.

In the late 1700s James Watt designed an efficient and commercially viable steam engine that was soon applied to a variety of industrial uses as it became cheaper to use. The engine helped solve the problem of draining coal mines of groundwater and increased the production of coal needed to power steam engines elsewhere. A rotary engine attached to the steam engine enabled shafts to be turned and machines to be driven, resulting in mills using steam power to spin and weave cotton. Since the steam engine was fired by coal, the large mills did not need to be located by rivers, as had mills that used water-driven machines. The shift to increased mechanization in cotton production is apparent in the import of raw cotton and the sale of cotton goods. Between 1760 and 1850, the amount of raw cotton imported increased 230 times. Production of British cotton goods increased sixtyfold, and cotton cloth became Great Britain's most important product, accounting for one-half of all exports. The success of the steam engine resulted in increased demands for coal, and the consequent increase in coal production was made possible as the steam-powered pumps drained water from the ever-deeper coal seams found below the water table.

The availability of steam power and the demands for new machines facilitated the transformation of the iron industry. Charcoal, made from wood and thus in limited supply, was replaced with coal-derived coke (substance left after coal is heated) as steam-driven bellows came into use for producing of raw iron. Impurities were burnt away with the use of coke, producing a high-quality refined iron. Reduced cost was also instrumental in developing steam-powered rolling mills capable of producing finished iron of various shapes and sizes. The resulting boom in the iron industry expanded the annual iron output by more than 170 times between 1740 and 1840, and by the 1850s Great Britain was producing more tons of iron than the rest of the world combined. The developments in the iron industry were in part a response to the demand for more machines and the ever-widening use of higher-quality iron in other industries.

Steam power and iron combined to revolutionize transport, which in turn had further implications. Improvements in road construction and sailing had occurred, but shipping heavy freight over land remained expensive, even with the use of rivers and canals wherever possible. Parallel rails had long been used in mining operations to move bigger loads, but horses were still the primary source of power. ■ However, the arrival of the steam engine initiated a complete transformation in rail transportation, entrenching and expanding the Industrial Revolution. ■ As transportation improved, distant and larger markets within the nation could be reached, thereby encouraging the development of larger factories to keep pace with increasing sales. ■ Greater productivity and rising demands provided entrepreneurs with profits that could be reinvested to take advantage of new technologies to further expand capacity, or to seek alternative investment opportunities. ■ Also, the availability of jobs in railway construction attracted many rural laborers accustomed to seasonal and temporary employment. When the work was completed, many moved to other construction jobs or to factory work in cities and towns, where they became part of an expanding working class.

1. **Why does the author provide the information that “Great Britain had large amounts of coal”?**
  - (A) To reject the claim that Britain was facing an energy shortage in the eighteenth century
  - (B) To explain why coal rather than other energy resources became the primary source of heat for homes and industries in eighteenth-century Britain
  - (C) To indicate that Britain’s energy shortage was not the result of a lack of fuel
  - (D) To explain why coal mining became an important industry in nineteenth-century
2. **What was “the problem of energy” that had to be solved to make the Industrial Revolution of the eighteenth century possible?**
  - (A) Water and wind could not be used efficiently.
  - (B) There was no efficient way to power machinery.
  - (C) Steam engines required large amounts of coal, which was in short supply.
  - (D) Neither humans nor animals were strong enough to provide the power required for industrial application.
3. **Which of the following is NOT mentioned in paragraph 2 as a development in cotton mills brought about by Watt’s steam engine?**
  - (A) The importing of huge quantities of raw cotton by Britain
  - (B) Increased mechanization
  - (C) More possibilities for mill location
  - (D) Smaller mills
4. **The phrase “apparent in” in the passage is closest in meaning to**
  - (A) clearly seen in
  - (B) aided by
  - (C) associated with
  - (D) followed by
5. **According to paragraph 2, what was Britain’s most important export by 1850?**
  - (A) Raw cotton
  - (B) Cotton cloth
  - (C) Steam-powered pumps
  - (D) Coal
6. **The word “consequent” in the passage is closest in meaning to**
  - (A) resulting
  - (B) encouraging
  - (C) well documented
  - (D) immediate
7. **What is the role of paragraph 2 in the passage as a whole?**
  - (A) It explains how by increasing the supply of raw materials from other countries, British industries were able to reduce costs and increase production.
  - (B) It explains how the production of mechanical energy and its benefits spread quickly across countries that were linked commercially with Great Britain.
  - (C) It demonstrates why developments in a single industry could not have caused the Industrial Revolution.
  - (D) It illustrates why historians have assigned great importance to the issue of energy in the rise of the Industrial Revolution.
8. **According to paragraph 3, why was the use of coke important for the iron industry?**
  - (A) It helped make wood into charcoal.
  - (B) It reduced the dependency on steam-powered machines used for the production of iron.
  - (C) It replaced charcoal in the production of raw and refined iron.
  - (D) It powered the machines used to extract coal in coal mines.
9. **According to paragraph 3, all of the following were true of the iron industry in Great Britain during the 1800s EXCEPT**
  - (A) Steam-driven bellows were used to produce raw iron.
  - (B) By the 1850s Britain was the world’s largest producer of iron.

- (C) Steam-powered mills made it possible to produce iron of different shapes and sizes.
- (D) Greater demand for higher-quality iron increased its price.

**10. The word “initiated” in the passage is closest in meaning to**

- (A) anticipated
- (B) accelerated
- (C) spread
- (D) started

**11. Paragraph 4 implies which of the following about the transformation in rail transportation?**

- (A) Because railway construction employed mostly rural laborers, unemployment increased among urban workers.
- (B) It resulted in more trade within the country, but less trade with markets that could be reached only by ocean shipping.
- (C) It made shipping freight overland to distant markets less expensive.
- (D) It resulted in higher wages for factory workers.

**12. The phrase “accustomed to” in the passage is closest in meaning to**

- (A) in need of
- (B) used to
- (C) tired to
- (D) encouraged by

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The first steam-powered locomotives were slow but they rapidly improved in speed and carrying capacity.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The coming of the Industrial Revolution in eighteenth-century Britain depended on the development of the steam engine to power machinery.

**Answer choices**

- (A) For years, historians disregarded the issue of energy as a major element in the rise of the Industrial Revolution and focused instead on technological developments and increased production.
- (B) The introduction and growth of steam-powered rail transport was a major factor in Britain’s economic expansion during the Industrial Revolution.
- (C) An expansion of the Industrial Revolution outside Great Britain occurred when British industries began to import raw cotton and high-quality iron.
- (D) By 1850, the use of steam power in Britain’s mills, mines, and iron industry made Britain a world leader in the production of cotton cloth and iron.
- (E) Since the basic infrastructure was in place, the Industrial Revolution fueled itself with enlarging markets requiring ever more expansion of factories and workforce.
- (F) By the end of the 1800s, railway construction attracted so many laborers that factories could not find enough workers to keep up with increasing sales.

## 参考答案与解析

1. 选 **C**。目的题，读 highlight 所在句，说英国有煤，但没法变成能量来运行机器，选项 C 同时说了有煤木有能量，是正确答案。A 错在不是 reject，原文承认缺能量，A 说反；B 错在原文没讲 other energy resources 怎么样；D 错在 coal mining 变成重要行业没讲。
2. 选 **B**。以 the problem of energy 做关键词定位至第二句，但这句话没有内容，下一句讲依靠动植物和人作为能量的来源，看完这句话最大的可能是选 D，但原文没说动植物和人的能源不够，所以 D 不对。排除法，A 说风和水能没有有效利用，而原文第四句说越来越多地使用，所以 A 错；C 跟上一题相反，错；B 跟上一题相同，正确。
3. 选 **D**。A 的 huge quantity of raw cotton 定位至倒数第三句，说进口增加了 230 倍，正确，不选；B 定位至第五句，说机械化越来越多，正确，不选；C 的 mill location 定位至第四句，说 mill 不用在水边了，也就是 C 说的更多可能的位置，正确，不选；也同样在这句话里说大的 mills，跟 D 说的相反，所以 D 错，选。
4. 选 **A**。apparent in 明显，答案 clearly seen in。
5. 选 **B**。以 most important export 和 1850 做关键词定位至倒数第二句和倒数第三句，说 raw cotton 进口增加了 230 倍，cotton cloth 变成了最重要的产品，占了出口的一半，所以正确答案是 B 的 cotton cloth。注意 A 的 raw cotton 是进口的。
6. 选 **A**。consequent 结果的，答案是 resulting。
7. 选 **D**。问整段看首尾。首句讲 1700 年代瓦特发明了蒸汽机，随着越来越便宜，应用越来越广；尾句说 steam engine 的成功导致煤炭需求和生产的增加。没有正确答案，可采用排除法，首先没讲除英国之外的其他国家，所以 A 和 B 都不对，C 说一个行业不能引起工业革命，原文也没讲。D 正确的原因是煤炭的应用解决了能源问题，正确，不记得的话看看第一段的末尾。
8. 选 **C**。以 coke 做关键词定位至第二句，讲在制铁的过程中，coke 替代了 charcoal，但没讲 coke 能干嘛，所以往下看，说 impurity 随着 coke 的使用被烧掉了，也就是除杂质，所以正确答案是 C，B 和 D 的 machine 没讲；A 说把木头变成 charcoal，原文也没说。
9. 选 **D**。以 A 的 steam-driven bellows 定位至第二句，正确，不选；B 的 1850s 和 Britain 定位至第五句，说英国的产量等于其他国家产量之和，当然是最大生产国，所以 B 正确，不选；C 的 different shapes and sizes 定位至第四句，正确，不选；D 的 price 没讲，错，选。
10. 选 **D**。initiated 开始，所以答案是 D。
11. 选 **C**。以 transformation in rail transportation 定位至第四句和第五句，说随着 transportation 改善，能到达更远更大的国内市场，导致更大的销量和更大的工厂，所以正确答案是 C。A 的 rural laborers，B 的 ocean shipping 和 D 的 wage 原文都没有有说。
12. 选 **B**。accustomed to 习惯，正确答案是 B。
13. 选 **B**。此题名词过渡不容易找，只能找到动词 improve，所以正确答案非 B 即 C。B 之后有 as transportation improved，也就是给出 improve 之后的结果，应该是先有 improve 后有结果，答案是 B。
14. 选 **BDE**。A 选项与首段第二句相反，错；B 选项对应最后一段，正确；C 选项中的 outside Great Britain 怎么样原文没讲，错；D 选项对应原文第二段和第三段，正确；E 选项对应原文最后一段后半部分，正确；F 选项中的工厂找不到工人跟 increasing sales 没说，错。

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Survival of Plants and Animals in Desert Conditions**

The harsh conditions in deserts are intolerable for most plants and animals. Despite these conditions, however, many varieties of plants and animals have adapted to deserts in a number of ways. Most plant tissues die if their water content falls too low: the nutrients that feed plants are transmitted by water; water is a raw material in the vital process of photosynthesis; and water regulates the temperature of a plant by its ability to absorb heat and because water vapor lost to the atmosphere through the leaves helps to lower plant temperatures. ■ Water controls the volume of plant matter produced. ■ The distribution of plants within different areas of desert is also controlled by water. ■ Some areas, because of their soil texture, topographical position, or distance from rivers or groundwater, have virtually no water available to plants, whereas others do. ■

The nature of plant life in deserts is also highly dependent on the fact that they have to adapt to the prevailing aridity. There are two general classes of vegetation: long-lived perennials, which may be succulent (water-storing) and are often dwarfed and woody, and annuals or ephemerals, which have a short life cycle and may form a fairly dense stand immediately after rain.

The ephemeral plants evade drought. Given a year of favorable precipitation, such plants will develop vigorously and produce large numbers of flowers and fruit. This replenishes the seed content of the desert soil. The seeds then lie dormant until the next wet year, when the desert blooms again.

The perennial vegetation adjusts to the aridity by means of various avoidance mechanisms. Most desert plants are probably best classified as xerophytes. They possess drought-resisting adaptations: loss of water through the leaves is reduced by means of dense hairs covering waxy leaf surfaces, by the closure of pores during the hottest times to reduce water loss, and by the rolling up or shedding of leaves at the beginning of the dry season. Some xerophytes, the succulents (including cacti), store water in their structures. Another way of countering drought is to have a limited amount of mass above ground and to have extensive root networks below ground. It is not unusual for the roots of some desert perennials to extend downward more than ten meters. Some plants are woody in type—an adaptation designed to prevent collapse of the plant tissue when water stress produces wilting. Another class of desert plant is the phreatophyte. These have adapted to the environment by the development of long taproots that penetrate downward until they approach the assured water supply provided by groundwater. Among these plants are the date palm, tamarisk, and mesquite. They commonly grow near stream channels, springs, or on the margins of lakes.

Animals also have to adapt to desert conditions, and they may do it through two forms of behavioral adaptation: they either escape or retreat. **Escape involves such actions as aestivation, a condition of prolonged dormancy, or torpor, during which animals reduce their metabolic rate and body temperature during the hot season or during very dry spells.**

Seasonal migration is another form of escape, especially for large mammals or birds. The term retreat is applied to the short-term escape behavior of desert animals, and it usually assumes the pattern of a daily rhythm. Birds shelter in nests, rock overhangs, trees, and dense shrubs to avoid the hottest hours of the day, while mammals like the kangaroo rat burrow underground.

Some animals have behavioral, physiological, and morphological (structural) adaptations that enable them to withstand extreme conditions. For example, the ostrich has plumage that is so constructed that the feathers are long but not too dense. When conditions are hot, the ostrich erects them on its back, thus increasing the thickness of the barrier between solar radiation and the skin. The sparse distribution of the feathers, however, also allows considerable lateral air movement over the skin surface, thereby permitting further heat loss by convection. Furthermore, the birds orient themselves carefully with regard to the Sun and gently flap their wings to increase convection cooling.

1. **According to paragraph 1, water provides all of the following essential functions for plants EXCEPT**
  - (A) improving plants' ability to absorb sunlight
  - (B) preventing plants from becoming overheated
  - (C) transporting nutrients
  - (D) serving as a raw material for photosynthesis
2. **Paragraph 3 suggests that during a dry year ephemerals**
  - (A) produce even more seeds than in a wet year
  - (B) do not sprout from their seeds
  - (C) bloom much later than in a wet year
  - (D) are more plentiful than perennials
3. **How is paragraph 2 related to paragraph 3?**
  - (A) Paragraph 2 provides a general description of desert plants, and paragraph 3 provides a scientific explanation for these observations.
  - (B) Paragraph 2 divides desert plants into two categories, and paragraph 3 provides further information about one of these categories.
  - (C) Paragraph 2 proposes one way of dividing desert plants into categories, and paragraph 3 explains one problem with this method of classification.
  - (D) Paragraph 2 discusses two categories of desert plants, and paragraph 3 introduces a third category of plants.
4. **In saying that ephemerals will develop "vigorously" when there is favorable precipitation, the author means that their development will be**
  - (A) sudden
  - (B) early
  - (C) gradual
  - (D) strong and healthy
5. **The word "countering" in the passage is closest in meaning to**
  - (A) eliminating
  - (B) making use of
  - (C) acting against
  - (D) experiencing
6. **According to paragraph 4, some desert plants with root systems that are extraordinarily well developed have**
  - (A) relatively little growth aboveground
  - (B) very leafy aboveground structures
  - (C) non woody plant tissue resistant to wilting
  - (D) water stored within their roots
7. **The word "assured" in the passage is closest in meaning to**
  - (A) pure
  - (B) diminished
  - (C) guaranteed
  - (D) deep
8. **What do "the date palm, tamarisk, and mesquite" have in common?**
  - (A) They are always found together.
  - (B) They depend on surface water provided by streams, springs, and lakes.
  - (C) They are phreatophytes.
  - (D) Their roots are capable of breaking through hard soils.
9. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) One way animals escape is by entering a state of extended dormancy, known as aestivation, during the hottest and driest times of year.

- (B) Animals can escape without using direct action, or aestivation, simply by reducing their metabolic rate and body temperature.
- (C) The actions that an animal uses to escape are known as aestivation, which sometimes involves a reduction in metabolic rate or body temperature.
- (D) When the weather is especially hot and dry, an animal may suffer from a condition known as aestivation, at which point the animal needs to escape.

**10. It can be inferred from paragraph 6 that all of the places desert animals retreat to**

- (A) provide shade from the sun
- (B) sometimes become crowded
- (C) are places where supplies of food are plentiful
- (D) leave the animals vulnerable to predators

**11. According to paragraph 7, what special adaptation helps the ostrich cope with hot desert conditions?**

- (A) Each of its feathers is very short and dense.
- (B) Its wings produce only lateral air movement when flapping.
- (C) Its feathers are very thickly set on both its back and its wings.
- (D) It can make its feathers stand up on its back.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

For this reason, the total amount of plant material in a desert is often 100 times less than the amount of plant material in an equivalent area of temperate forest.

**Where would the sentence best fit?**

**13. Directions: Select from the seven phrases below the two phrases that correctly characterize special adaptations found primarily in desert annuals and the three phrases that correctly characterize special adaptations found primarily in desert perennials. Select each phrase you select in the appropriate column of the table. This question is worth 3 points.**

Adaptations of Annuals (TWO):
-------------------------------

Adaptations of Perennials (THREE):
------------------------------------

**Answer choices**

- (A) Woody structures
- (B) Explosive growth in wet years
- (C) Long, thin, shallow roots
- (D) Storage of water in plant tissue
- (E) Minimization of the amount of water used for photosynthesis
- (F) Short life cycle
- (G) Leaves designed to minimize water loss

**笔记区**

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **A**。A 选项的 sunlight 原文没有提到，所以错误，选；B 项不容易找，可以找完 C 和 D 之后依靠并列在第三句的冒号之后找到，原文讲的是降低温度，也就是防止 overheated，所以 B 正确，不选；C 和 D 都在第三句的冒号之后，都正确，不选。
2. 选 **B**。以 dry year 和 ephemeral 做关键词定位至首句，但只看这句话没有答案，于是看最后一句，讲植物种子直到下个 wet year 之前都 dormant，也就是 dry year 的时候它们休眠，所以正确答案是 B。注意 C 有迷惑性，虽然原文提到了 wet year，但没有讲干湿年份进行比较，所以 C 错；A 犯了跟 C 相同的错误；D 错在原文没有把 ephemeral 跟 perennial 进行比较。
3. 选 **B**。问两段关系，看开头。第二段开头说植物需要适应沙漠的干旱环境，第二句说有二类；第三段开头讲其中一类，因此应该是第二段总述，第三段分述，所以正确答案是 B。A 错在第三段没有 scientific explanation；C 错在第三段不是讲分类的问题；D 错在第三段讲的是第二段两个分类中的一个，而不是第三类。
4. 选 **D**。vigorously 旺盛地，答案是 strong。
5. 选 **C**。countering 反、抵御，抵抗，答案是 C。
6. 选 **A**。以 root systems that are extraordinarily well developed 做关键词定位至第五句，说另外一种抗击干旱的方法是植物地上部分小地下部分大，所以正确答案是 A。B 刚好说反；C 的 non woody 和 D 的 water 都不在定位句中。
7. 选 **C**。assured 确定的，答案是 guaranteed。
8. 选 **C**。以 date palm, tamarisk and mesquite 做关键词定位至倒数第二句，这句没法做答案，但 these 告诉我们和前句有关，读到倒数第四句说另一种沙漠植物是 ph，所以正确答案是 C，其他都没说。
9. 选 **A**。提取主干，去掉 during which 从句得到 escape 的方法包括 aestivation 或者 torpor。很容易排除 B 和 D，因为 B 说不用 aestivation，D 说 suffer；C 最明显的错误是减少 metabolic rate or body temperature，而原文讲的是 metabolic rate and body temperature，所以正确答案是 A。
10. 选 **A**。以 desert animals retreat 做关键词定位至首句，说包含两种方法，一是 escape，二是 retreat，但接下来的整段都在讲 escape，没有 retreat 的事儿，这道题真正的答案应该在下一段，下一段第二句开始讲 retreat，尾句讲鸟 retreat 为了躲避炎热，哺乳动物躲到洞里，也就是说 retreat 是为了避暑，正确答案是 A。如果没有看到下一段的同学，这段最后一句讲 escape 发生在炎热或者干燥的时期，同样可以推出躲避阳光，这是个 infer 题。
11. 选 **D**。以 ostrich 做关键词定位至第二句和第三句，第三句说当炎热的时候，ostrich 会竖起它们背上的羽毛，所以正确答案是 D。B 没提到 feather，错；A 说 feather 短，错；C 的 both blabla 原文没说，错。
12. 选 **B**。目前暂无解析。
13. Annuals 选 **BF**，Perennials 选 **ADG**。Annual 跟 Perennial 主要在第二至第四段讲到。A 选项在第二段第二句刚讲到分类的时候，属于 perennial；B 选项在第二段最后以及整个第三段都有讲到，尽管不是原词，但说到一旦降水多就立刻生长的很好，也就是 explosive 了，所以属于 annual；C 选项错，因为原文说 extensive root network 是应付干旱的方法，没讲到 shallow root；D 选项同样在第二段第二句刚讲到分类的时候就说了，属于 perennial；E 选项原文完全没讲到，不是任何一个 category 的选项；F 选项同样在第二段第二句刚讲到分类的时候就说了，属于 annual；G 选项在第四段第二句，属于 perennial。



## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Sumer and the First Cities of the Ancient Near East**

The earliest of the city states of the ancient Near East appeared at the southern end of the Mesopotamian plain, the area between the Tigris and Euphrates rivers in what is now Iraq. It was here that the civilization known as Sumer emerged in its earliest form in the fifth millennium. At first sight, the plain did not appear to be a likely home for a civilization. There were few natural resources, no timber, stone, or metals. Rainfall was limited, and what water there was rushed across the plain in the annual flood of melted snow. As the plain fell only 20 meters in 500 kilometers, the beds of the rivers shifted constantly. It was this that made the organization of irrigation, particularly the building of canals to channel and preserve the water, essential. Once this was done and the silt carried down by the rivers was planted, the rewards were rich: four to five times what rain-fed earth would produce. It was these conditions that allowed an elite to emerge, probably as an organizing class, and to sustain itself through the control of surplus crops.

It is difficult to isolate the factors that led to the next development—the emergence of urban settlements. The earliest, that of Eridu, about 4500 B.C.E., and Uruk, a thousand years later, center on impressive temple complexes built of mud brick. In some way, the elite had associated themselves with the power of the gods. Uruk, for instance, had two patron gods—Anu, the god of the sky and sovereign of all other gods, and Inanna, a goddess of love and war—and there were others, patrons of different cities. Human beings were at their mercy. The biblical story of the Flood may originate in Sumer. In the earliest version, the gods destroy the human race because its clamor had been so disturbing to them.

It used to be believed that before 3000 B.C.E. the political and economic life of the cities was centered on their temples, but it now seems probable that the cities had secular rulers from earliest times. ■ Within the city lived administrators, craftspeople, and merchants. (Trading was important, as so many raw materials, the semiprecious stones for the decoration of the temples, timbers for roofs, and all metals, had to be imported.) ■ An increasingly sophisticated system of administration led in about 3300 B.C.E. to the appearance of writing. ■ The earliest script was based on logograms, with a symbol being used to express a whole word. ■ The logograms were incised on damp clay tablets with a stylus with a wedge shape at its end. (The Romans called the shape cuneus and this gives the script its name of cuneiform.) Two thousand logograms have been recorded from these early centuries of writing. A more economical approach was to use a sign to express not a whole word but a single syllable. (To take an example: the Sumerian word for “head” was “sag.” Whenever a word including a syllable in which the sound “sag” was to be written, the sign for “sag” could be used to express that syllable with the remaining syllables of the word expressed by other signs.) By 2300 B.C.E. the number of signs required had been reduced to 600, and the range of words that could be expressed had widened. Texts dealing with economic matters predominated, as they always had done; but at this point works of theology, literature, history, and law also appeared.

Other innovations of the late fourth millennium include the wheel, probably developed first as a more efficient way of making pottery and then transferred to transport. A tablet engraved about 3000 B.C.E. provides the earliest known example from Sumer, a roofed boxlike sledge mounted on four solid wheels. **A major development was the discovery, again about 3000 B.C.E., that if copper, which had been known in Mesopotamia since about 3500 B.C.E., was mixed with tin, a much harder metal, bronze, would result.** Although copper and stone tools continued to be used, bronze was far more successful in creating sharp edges that could be used as anything from saws and scythes to weapons. The period from 3000 to 1000 B.C.E., when the use of bronze became widespread, is normally referred to as the Bronze Age.

1. **Which of the following is NOT mentioned in paragraph 1 as a disadvantage of the Mesopotamian plain?**
  - (A) There was not very much rainfall for most of the year.
  - (B) Melting snow caused flooding every year.
  - (C) The silt deposited by rivers damaged crops.
  - (D) Timber, stone and metals were not readily available.
2. **According to paragraph 1, which of the following made it possible for an elite to emerge?**
  - (A) New crops were developed that were better suited to conditions on the Mesopotamian plain.
  - (B) The richest individuals managed to gain control of the most valuable cropland.
  - (C) Control over the few available natural resources made some people four to five times richer than everyone else.
  - (D) The building of canals to increase agricultural output required organization.
3. **The word “sustain” in the passage is closest in meaning to**
  - (A) defend
  - (B) promote
  - (C) maintain
  - (D) transform
4. **According to paragraph 2, Eridu and Uruk are examples of urban settlements that**
  - (A) lacked the features usually found in other early urban settlements
  - (B) developed around religious buildings
  - (C) grew much more rapidly than most of the urban settlements found in Sumer
  - (D) were mysteriously destroyed and abandoned
5. **The word “sovereign” in the passage is closest in meaning to**
  - (A) counselor
  - (B) master
  - (C) defender
  - (D) creator
6. **According to paragraph 3, which of the following led to the appearance of writing?**
  - (A) An increasingly sophisticated administrative system
  - (B) Coordination between secular and religious leaders
  - (C) The large volume of trade, particularly imports
  - (D) A rapidly expanding and changing population
7. **In paragraph 3, why does the author provide the information that the number of signs in use had dropped from 2,000 to 600 by 2300 B.C.E.?**
  - (A) To argue that the development of writing involved periods of growth followed by periods of decline
  - (B) To demonstrate that earlier written texts used a larger vocabulary than later texts, which were aimed at a broader audience
  - (C) To support the claim that the range of words expressed by logograms varied widely depending on time period and type of text
  - (D) To provide evidence for the increased efficiency of using signs to express syllables rather than whole words
8. **According to paragraph 3, ancient texts most commonly dealt with**
  - (A) theology
  - (B) literature
  - (C) economics
  - (D) law
9. **According to paragraph 4, the earliest wheels probably**
  - (A) were first developed in areas outside Mesopotamia
  - (B) were used to make pottery
  - (C) appeared on boxlike sledges
  - (D) were used to transport goods between cities
10. **The word “engraved” in the passage is closest in meaning to**

- (A) carved
- (B) produced
- (C) dated
- (D) discovered

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Also around 3000 B.C.E., it was discovered that mixing copper, known from about 3500 B.C.E., with tin would create a much harder metal known as bronze.
- (B) Although copper had been known since 3500 B.C.E. in Mesopotamia, the discovery of bronze did not occur until around 3000 B.C.E.
- (C) Another major development around 3000 B.C.E. was the discovery that copper could be mixed with a much harder metal known as tin.
- (D) The development of bronze by mixing copper and tin probably occurred around 3000 B.C.E. but may have happened as early as 3500 B.C.E.

**12. The word “widespread” in the passage is closest in meaning to**

- (A) obvious
- (B) significant
- (C) necessary
- (D) common

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

City life was diverse, and the population was engaged in a variety of occupations.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Irrigation made it possible for the civilization known as Sumer to arise on the Mesopotamian plain in the fifth millennium B.C.E.

**Answer choices**

- (A) The scarcity of natural resources on the plain made it necessary for a powerful elite to emerge and take charge of trade and imports.
- (B) The economy of each city was based on a craft such as pottery or metal working, and the city of Eridu was known for its saws, scythes and weapons.
- (C) Writing appeared in the form of logograms and later developed into a system using signs to represent syllables rather than whole words.
- (D) Priests were powerful figures in the ancient civilization and controlled the political and economic life of the cities.
- (E) The earliest city states had one or more patron gods and were built around central temple complexes.
- (F) The development of the wheel and the creation of bronze were important innovations in Sumer.

### 参考答案与解析

1. 选 **C**。A 选项的 rainfall 和 B 的 melting snow 做关键词定位至第五句，都正确，不选；C 的 silt 确实讲过，但并没讲 damaged crops，所以 C 错，选；D 的 timber, stone and metals 定位至第四句，正确，不选。
2. 选 **D**。以 elite to emerge 做关键词定位至尾句，但这句话的 these 说明应该往前看，前前句说 organization of irrigation 和 building canals 非常重要，所以正确答案是 D。A 的 new crop 没提，B 和 C 犯了类似的错误，原文讲土壤肥沃，不是人有钱，所以都错。
3. 选 **C**。sustain 维持，答案是 maintain。
4. 选 **B**。两个专有名词做关键词定位至第二句，说这两个族是以 temple 为中心发展的，也就是 B 说的 religious buildings，所以答案是 B。A 和 C 的 urban settlement，D 的 destroy 原文都没说。
5. 选 **B**。sovereign 统治者，答案是 B。
6. 选 **A**。以 appearance of writing 做关键词定位至第一个括号之后那句，说越来越复杂的管理体系导致了 writing，所以正确答案是 A。B 的 leaders，C 的 imports 和 D 的 population 都不在定位句中，不选。
7. 选 **D**。以数字做关键词定位至第三个括号之后那句，整个句子都是个例子，由于是目的题，所以往前看，前面的括号同样是例子，再往前，说更经济的方式是用 sign 不表达一个完整单词而表达一个 syllable，说到这个的只有 D。A 的增长和衰落时期，B 的 larger vocabulary 都没讲，不选；C 的 logogram 虽然讲到，但原文没有说 varied widely，所以不选。
8. 选 **C**。以 ancient texts 定位至最后一句，原文讲 economic matters predominated，也就是问题问的 most commonly，正确答案是 C，其他都没说。
9. 选 **B**。以 wheel 做关键词定位至第一句，原文讲 wheel 最早是一个 efficient 的方法去制作 pottery 后来才转到 transport 的，所以正确答案是 B，D 有一定迷惑性，但注意是后来才有 transport 的，所以 D 不对，其他都没说。
10. 选 **A**。engraved 雕刻的，正确答案是 A。
11. 选 **A**。提取主干，去掉 again 插入语和 which 定语从句，得到原文说主要的进步是发现了如果 copper 跟 tin 混合，就能够得到更硬的金属 bronze，所以正确答案是 A。B 错在没有讲 mixing copper with tin；C 错在更硬的不是 tin，而是 bronze；D 错在发生在 3500 BCE 的不是 bronze，而是 copper 的发现。
12. 选 **D**。widespread 广泛的，答案是 common。
13. 选 **A**。以 a variety of occupations 作过渡点，定位到 A 之后的 administrators, craftspeople and merchants，这是一对具体的职业，而待插入句中的 a variety of occupations 是抽象概念，按照先总述后分述的逻辑关系，正确的插入点是 A 不是 B。
14. 选 **CEF**。A 选项的前半部分对应第一段最后，但原文没讲过 take charge of trade and imports，所以错，不选；B 选项原文没讲，而且就算是说对了，因为有 Eridu 这样具体的东西，也不会成为答案；C 选项对应原文第三段后半部分，正确；D 选项原文完全没讲，不选；E 选项对应原文第二段，正确；F 选项对应原文最后一段，正确。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Crafts in the Ancient Near East

Some of the earliest human civilizations arose in southern Mesopotamia, in what is now southern Iraq, in the fourth millennium B.C.E. In the second half of the millennium, in the south around the city of Uruk, there was an enormous escalation in the area occupied by permanent settlements. A large part of that increase took place in Uruk itself, which became a real urban center surrounded by a set of secondary settlements. **While population estimates are notoriously unreliable, scholars assume that Uruk inhabitants were able to support themselves from the agricultural production of the field surrounding the city, which could be reached with a daily commute.** But Uruk's dominant size in the entire region, far surpassing that of other settlements, indicates that it was a regional center and a true city. Indeed, it was the first city in human history.

The vast majority of its population remained active in agriculture, even those people living within the city itself. But a small segment of the urban society started to specialize in nonagricultural tasks as a result of the city's role as a regional center. Within the productive sector, there was a growth of a variety of specialist craftspeople. Early in the Uruk period, the use of undecorated utilitarian pottery was probably the result of specialized mass production. In an early fourth-millennium level of the Eanna archaeological site at Uruk, a pottery style appears that is most characteristic of this process, the so-called beveled-rim bowl. It is a rather shallow bowl that was crudely made in a mold; hence, in only a limited number of standard sizes. For some unknown reason, many were discarded, often still intact, and thousands have been found all over the Near East. The beveled-rim bowl is one of the most telling diagnostic finds for identifying an Uruk-period site. Of importance is the fact that it was produced rapidly in large amounts, most likely by specialists in a central location.

A variety of documentation indicates that certain goods, once made by a family member as one of many duties, were later made by skilled artisans. Certain images depict groups of people, most likely women, involved in weaving textiles, an activity we know from later third-millennium texts to have been vital in the economy and to have been centrally administered. Also, a specialized metal-producing workshop may have been excavated in a small area at Uruk. It contained a number of channels lined by a sequence of holes, about 50 centimeters deep, all showing burn marks and filled with ashes. This has been interpreted as the remains of a workshop where molten metal was scooped up from the channel and poured into molds in the holes. Some type of mass production by specialists were involved here.

Objects themselves suggest that they were the work of skilled professionals. In the late Uruk period (3,500–3,100 B.C.E.), there first appeared a type of object that remained characteristic for Mesopotamia throughout its entire history: the cylinder seal. ■ This was a small cylinder, usually no more than 3 centimeters high and 2 centimeters in diameter, of shell, bone, faience (a glassy type of stoneware), or various types of stones, on which a scene was carved into the surface. ■ When rolled over a soft material—primarily the clay of bullae (round seals), tablets, or clay lumps attached to boxes, jars, or door bolts—the scene would appear in relief, easily legible. ■ The technological knowledge needed to carved it was far superior to that for stamp seals, which had happened in the early Neolithic period (approximately 10,000–5,000 B.C.E.). ■ From the first appearance of cylinder seals, the carved scenes could be highly elaborate and refined, indicating the work of specialist stone-cutters. Similarly, the late Uruk period shows the first monumental art, relief, and statuary in the round, made with a degree of mastery that only a professional could have produced.

1. Which of the sentences below best express the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Although scholars cannot accurately determine the size of the Uruk population, they know the citizens were not dependent on agriculture.
  - (B) Scholars do not have enough evidence to determine whether the agriculture areas just outside of Uruk were large enough to feed the city's population.
  - (C) Because city populations cannot feed themselves, scholars think the surrounding farms provided food to the people in Uruk.
  - (D) Scholars believe that the inhabitants of Uruk were able to support themselves from product grown in field surrounding the city.
2. The word "surpassing" in the passage is closest in meaning to
  - (A) proceeding
  - (B) exceeding
  - (C) challenging
  - (D) outlasting
3. According to paragraph 1, all of the following are true of the ancient settlement at Uruk EXCEPT
  - (A) It was a permanent settlement.
  - (B) It was self-sufficient.
  - (C) It was one of a group of other larger settlements.
  - (D) It had easy access to the land where its crops were grown.
4. The word "intact" in the passage is closest in meaning to
  - (A) unsold
  - (B) unused
  - (C) undamaged
  - (D) unpainted
5. According to paragraph 2, which of the following best describes the beveled-rim bowls from the Eanna Archaeological site at Uruk?
  - (A) They were discarded because they became unpopular.
  - (B) They varied greatly in shape and decoration.
  - (C) They were each individually styled.
  - (D) They were made in only a few sizes.
6. Which of the following can be inferred from paragraph 2 about craft production in the Uruk period?
  - (A) Specialists in nonagricultural tasks obtained a higher status than those engaged in agricultural production.
  - (B) People not needed for farming could perform other more specialized activities.
  - (C) Ancient crafts were beginning to be produced for both utilitarian and decorative purposes.
  - (D) Pottery making was the only known during the fourth millennium.
7. According to paragraph 3, which of the following is true of textile production after the fourth millennium?
  - (A) It had an important commercial value.
  - (B) It existed but was not well organized.
  - (C) It is not documented in the archaeological record.
  - (D) It was carried on by individuals in their own homes.
8. The word "interpreted" in the passage is closest in meaning to
  - (A) documented
  - (B) debated
  - (C) displayed
  - (D) understood
9. What is the purpose of paragraph 3?
  - (A) To contrast the productivity of crafts workers in the third and fourth millennia

- (B) To provide additional evidence of mass production by crafts workers
- (C) To suggest that an early form of urban settlement may have exist before Uruk
- (D) To contrast the development of weaving and pottery in Uruk

**10. The word “legible” in the passage is closest in meaning to**

- (A) printable
- (B) enjoyable
- (C) recognizable
- (D) available

**11. Paragraph 4 suggests which of the following about the significances of Mesopotamian cylinder seals?**

- (A) They were designed more for home than for legal use.
- (B) They demonstrate that their creators were professionals.
- (C) They were the first example of seals made from materials other than stone.
- (D) They were the first example of carved seals.

**12. According to paragraph 4, one of the artistic achievements of the late Uruk culture was**

- (A) Its sophisticated sculpture and relief carving
- (B) Its architecturally complex monuments
- (C) Its invention of stamp seals carved from stone
- (D) Its use of highly refined glassy stoneware

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

When viewed on the curved surface of the cylinder, the image looked distorted, but the carved image served only as a mold.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Uruk, located in ancient Mesopotamia, flourished in the fourth millennium B.C.E. and was the first city in human history.

**Answer choices**

- (A) A variety of evidence indicates that Uruk, while it supported itself primarily by agriculture, also had specialized craft workers.
- (B) The monumental sculptures of Uruk were made by the specialist stone cutters who also produced small-scale relief scenes on shell, bone and faience.
- (C) The large number, standardized sizes, and simple molded construction of a type of pottery produced in Uruk demonstrate specialized, centrally organized mass production.
- (D) Cylinder seals from the late Uruk period are far superior to the stamp earlier Neolithic period.
- (E) Archaeological evidence from across the Near East indicates that Uruk was a center for the production and export of highly decorated pottery made by craft specialists in private homes.
- (F) The carved designs on cylinder seals produced in Uruk are of such technical and artistic excellence that they could only have been produced by professional artisans.

### 参考答案与解析

1. 选 **D**。找到句子主谓宾，主语是 scholars，谓语 assume，宾语是从句说“当地住民可以自给自足……”根据这些信息去对照选项，很容易得到 D。A 选项说不依赖于农业，与原文矛盾；B 说学者不能确定农业产品是否够用，也不对；C 的前半句就错了，并且原句也没有因果的逻辑关系，排除。
2. 选 **B**。surpassing 超出，优于，答案是 B。
3. 选 **C**。A 对应于原文第二句后半句，B 对应第一题的高亮句，C 与原文矛盾，Uruk 是最大的 settlement，D 对应高亮句，说他们可以自给自足。所以 C 项错误，选。
4. 选 **C**。原文这句话前半句说被抛弃了，后面又说被发现了。中间的 still 有轻微的转折意味，所以应该是虽然被扔掉了，但是依然怎么样，然后被大量发现了。可以通过带入的方式来排除。A 未售的，不对。B 没用过的，也不通顺。C 未受损的，通顺，选。D 未上色的，文章没提到，也跟原句逻辑不符。
5. 选 **D**。A，原文说不知道为什么被抛弃了，错。B，原文说这种陶器长得都一样，而且没有 decoration。C，原文对其 style 进行了描述，说它是一种很浅的、用模具做的碗，因此可知它的 style 是很统一的。D 正确对应原文 hence, in only a limited number of standard sizes。
6. 选 **B**。A 原文并没说不从事农业的人有更高的社会地位。B 原文第二句 but…说有些人开始了 specialized activities，正确。C 对应原文第四句，说这种碗是 undecorated, utilitarian，所以 C 错。D 原文第三句说到了 growth of variety，而选项说单一，所以矛盾，不选。
7. 选 **A**。根据 textile production 定位至第二句。原文写到 have been centrally administered，可判断 BD 错，C 根据 from later third millennium texts 证明是被 documented，所以 C 不对。正确答案为 A，对应 vital in the economy。
8. 选 **D**。interpreted 解释，答案选 D。
9. 选 **B**。前面几段都提到了各种类型的 mass production，这段第一句又一次提到了 certain goods were later made by skilled artisan。AD 都不对，因为原文没有对比的逻辑；C 也不符合上下文逻辑，文章本段主题也不是这个。
10. 选 **C**。legible 可辨认的、清晰的，答案是 C。
11. 选 **B**。整段文章都在写 cylinder seal，本段的第一句话说 Objects themselves suggest that they were the work of skilled professionals，证明这段是在举例说明去 professional skill，因此选 B。
12. 选 **A**。目前暂无解析。
13. 选 **B**。这里要插入的句子是说这个印章的表面非常扭曲，但只是作为一个模型，这里出现了转折。那证明后面应该会出现与其相反的态度描述。A 处刚开始描述印章的样子，到 B 处插入句子非常流畅，自然而然地说到了印章的表面。B 处之后出现了转折说印在软质地材料上的图案非常清晰。逻辑合理。CD 逻辑都不通。
14. 选 **AEF**。A 正确，对应第一题和第二段第二句；B 无明显错误，对应最后一段的倒数第三句，但只是细节，不选；C 原文并没有说做这个 monumental sculpture 的人和做印章的是一样的，不选；D 错误，highly decorated pottery 与原文矛盾，原文第二段第四句说 undecorated utilitarian pottery；E 正确，对应原文第二段；F 正确。对应原文最后一段。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



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用时：     分     秒

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错误：     个

**The Formation of Volcanic Islands**

Earth's surface is not made up of a single sheet of rock that forms a crust but rather a number of "tectonic plates" that fit closely, like the pieces of a giant jigsaw puzzle. Some plates carry islands or continents others form the seafloor. All are slowly moving because the plates float on a denser semi-liquid mantle, the layer between the crust and Earth's core. The plates have edges that are **spreading ridges** (where two plates are moving apart and new seafloor is being created), **subduction zones** (where two plates collide and one plunges beneath the other), or **transform faults** (where two plates neither converge nor diverge but merely move past one another). It is at the boundaries between plates that most of Earth's volcanism and earthquake activity occur.

Generally speaking, the interiors of plates are geologically uneventful. However, there are exceptions. **A glance at a map of the Pacific Ocean reveals that there are many islands far out at sea that are actually volcanoes—many no longer active, some overgrown with coral—that originated from activity at points in the interior of the Pacific Plate that forms the Pacific seafloor.**

How can volcanic activity occur so far from a plate boundary? The Hawaiian Islands provide a very **instructive** answer. ■ Like many other island groups, they form a chain. ■ The Hawaiian Islands Chain extends northwest from the island of Hawaii. ■ In the 1840s American geologist James Daly observed that the different Hawaii islands seem to share a similar geologic evolution but are progressively more **eroded**, and therefore probable older, toward the northwest. ■ Then in 1963, in the early days of the development of the theory of plate tectonics. Canadian geophysicist Tuzo Wilson realized that this age progression could result if the islands were formed on a surface plate moving over a fixed volcanic source in the interior. Wilson suggested that the long chain of volcanoes stretching northwest from Hawaii is simply the surface expression of a long-lived volcanic source located beneath the tectonic plate in the mantle. Today's most northwest island would have been the first to form. They as the plate moved slowly northwest, new volcanic islands would have forms as the plate moved over the volcanic source. The most recent island, Hawaii, would be at the end of the chain and is now over the volcanic source.

Although this idea was not immediately accepted, the dating of lavas in the Hawaii (and other) chains showed **that their ages increase away from the presently active volcano**, just as Daly had suggested. Wilson's analysis of these data is now a central part of plate tectonics. Most volcanoes that occur in the interiors of plates are believed to be produced by mantle plumes, columns of molten rock that rise from deep within the mantle. A volcano remains an active "hot spot" as long as it is over the plume. The plumes apparently originate at great depths, perhaps as deep as the boundary between the core and the mantle, and many have been active for a very long time. The oldest volcanoes in the Hawaii hot-spot trail have ages close to 80 million years. Other islands, including Tahiti and Easter Islands in the Pacific, Reunion and Mauritius in the Indian Ocean, and indeed most of the large islands in the world's oceans, owe their existence to mantle plumes.

The oceanic volcanic islands and their hot-spot trails are thus especially useful for geologists because they record the past locations of the plate over a fixed source. They therefore permit the reconstruction of the process of seafloor spreading, and consequently of the geography of continents and of ocean basins in the past. For example, given the **current** position of the Pacific Plate, Hawaii is above the Pacific Ocean hot spot. So the position of The Pacific Plate 50 million years ago can be determined by moving it such that a 50-million-year-old volcano in the hot-spot trail sits at the location of Hawaii today. However because the ocean basins really are short-lived features on geologic times scale, reconstruction the world's geography by backtracking along the hot-spot trail works only for the last 5 percent or so of geologic time.

1. The author mentions “spreading ridges”, “subduction zones”, and “transform faults” in order to
  - (A) illustrate that the boundaries of tectonic plates are neat, thin lines
  - (B) explain why some tectonic plates carry islands or continents while others form the seafloor
  - (C) explain the complex nature of the edges of tectonic plates
  - (D) provide examples of areas of tectonic plates where little geologic action occurs
2. The word “converge” in the passage is closest in meaning to
  - (A) expand
  - (B) form
  - (C) rise
  - (D) move closer
3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Volcanic activity is responsible for the formation of the Pacific seafloor in the interior of the Pacific Plate.
  - (B) Many volcanoes in the Pacific Ocean are no longer active and have become islands that support coral.
  - (C) There are many islands in the Pacific Ocean that originated as volcanoes in the interior of the Pacific Plate.
  - (D) The map of the Pacific Ocean reveals fewer volcanic islands than there truly are because many are no longer active and some are completely overgrown with coral.
4. The word “instructive” in the passage is closest in meaning to
  - (A) clear
  - (B) detailed
  - (C) informative
  - (D) familiar
5. The word “eroded” in the passage is closest in meaning to
  - (A) worn down
  - (B) scattered
  - (C) developed
  - (D) deserted
6. In paragraph 3, what is the relationship between the scientific contribution of James Daly and Tuzo Wilson?
  - (A) Wilson provided an explanation for the observations made by Daly.
  - (B) Wilson challenged the theory proposed by Daly.
  - (C) Wilson found numerous examples of island chains that supported Daly’s theory.
  - (D) Wilson popularized the explanation of volcanic island formation formulated by Daly.
7. Why does the author provide the information that “the dating of lavas in the Hawaii (and other) chains showed that their ages increase away from the presently active volcano”?
  - (A) To point out differences between the Hawaii island chain and other volcanic island chains
  - (B) To question the idea that all the islands in an island chain have been formed by volcanic activity
  - (C) To explain why Wilson hypothesis was initially difficult to accept
  - (D) To provide evidence in support of Daly’s and Wilson’s ideas about how the Hawaii islands were formed
8. According to paragraph 4, which of the following is true of mantle plumes
  - (A) They exist close to the surface of tectonic plates.
  - (B) They cause most of the volcanic activity that occurs in the interiors of plates.
  - (C) They are rarely active for long period of time.
  - (D) They get increasingly older away from the present hot spots.
9. According to paragraph 5, volcanic islands help geologists to
  - (A) reconstruct past geography
  - (B) detect changes in mantle plumes
  - (C) measure the rigidity of tectonic plates

(D) explain why the seafloor spreads

**10. What can be inferred about the Pacific Plate from paragraph 5?**

- (A) The hot spots on the Pacific Plate are much older than the ones located on the other tectonic plates.
- (B) Most of the volcanic sources beneath the Pacific Plate have become extinct.
- (C) The Pacific Plate has moved a distance equal to the length of the Hawaiian Island chain in the past 80 million years.
- (D) The Pacific Plate is located above fewer mantle plumes than other plates are.

**11. The word “current” in the passage is closest in meaning to**

- (A) original
- (B) ideal
- (C) relative
- (D) present

**12. According to paragraph 5, why are geologists unable to trace back the entire geologic of continents from hot-spot trails?**

- (A) Hot spots have existed for only about 5 percent of geologic time.
- (B) Hawaii did not exist 50 millions years ago.
- (C) Oceanic basins that contained old hot-spot trails disappeared a long time ago.
- (D) Hot-spot trails can be reconstructed only for island chains.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This pattern remained unexplained for a long time.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Although volcanic activity is concentrated on the edge of tectonic plates, such activity can occur in the interiors of plates as well.

**Answer choices**

- (A) Our understanding of islands comes from Daly’s and Wilson’s observations of the Hawaiian Islands, which was later confirmed by plate-tectonic theory.
- (B) The hot-spot trails formed by volcanic island chains indicate the positions of tectonic plates as far back as the present ocean basins have existed.
- (C) Whereas volcanic islands formed by mantle plumes are typically small, most of the world’s largest islands are formed at the edges of tectonic plates.
- (D) It has only recently been discovered that tectonic plates are closely fitting rather than loosely constructed, as geologist previously believed.
- (E) Volcanic island chains such as the Hawaiian Islands form in the interior of a tectonic plate as the plate moves over a fixed volcanic source in the mantle.
- (F) The Pacific Plate has existed for as long as the Hawaiian Islands have existed, namely for more than 80 million years.

### 参考答案与解析

1. 选 **C**。原文这部分介绍了各种不同的 edges 的现象，并做了详细的解释，前面也说到 plate 的组成就像是 jigsaw puzzle，从两处可以看出应该是要体现其复杂性。A 与原文矛盾，原文并没有对 B 做出解释，D 原文给出的是 geologic action 常发的地方，而不是 little occurs。
2. 选 **D**。converge 汇聚，答案是 move closer。
3. 选 **C**。根据这一段的第一句可以看出后面是在举例说内陆平静的 exception。ABD 选项都是句子的细节，不能表达其目的，所以不选。
4. 选 **C**。instructive 具有启发性的，答案是 C。
5. 选 **A**。erode 侵蚀，答案选 worn down。
6. 选 **A**。根据两个科学家的名字进行定位，从 then in 1963 这一句可以了解到两者关系，说在板块理论刚开始发展的时期，Tuzo Wilson 发现……那么肯定是使板块理论进一步发展了，所以 B 不对。而 C 虽然逻辑关系对，但文中只给了夏威夷岛一个例子，所以 C 不选。D 说使解释流行，之前 Daly 只是给了理论，并没解释，所以不对。而 A 既符合逻辑关系，也对 Wilson 的描写是正确的。
7. 选 **D**。这个题很简单啦，往后面再多看一点点就知道答案啦，just as Daly had suggested。
8. 选 **B**。根据 mantle plumes 定位，可定位地第一句，即它是导致板块内部火山爆发的原因。往后读可以看到它首先是起源于很深的地方，其次活动时间很长。因此 ACD 都不对，所以正确答案为 B。
9. 选 **A**。定位到这一段的第二句，D 虽然也对，但是 A 可以包括 D，所以优选 A。
10. 选 **C**。定位到 for example，定位句几乎就是选项 C 的原义转换啦。ABD 原文都没提到。
11. 选 **D**。current 现在，答案是 D。
12. 选 **C**。定位到最后一句，说不能追踪到整个变化过程是因为海洋盆地的变化相对较快。
13. 选 **D**。D 的位置前面提到了大陆板块构造论，但并没给出解释，后半部分给出了很多年后另一位科学家的解释。
14. 选 **ACD**。A 正确，整篇文章都在说这个，一直在说夏威夷岛的火山现象证明了大陆板块构造理论；B 错误，当初 Daly 提出的时候就说是 closely fitting 的呀；C 正确，对应文章最后一段；D 正确，对应文章第二段；E 错误，文章没提到这些火山小；F 错误。文章最后一段说到 ocean basin 是相对短暂的存在，并没有存在超过 8 千万年。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。

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用时：     分     秒

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错误：     个

**Predator-Prey Cycles**

How do predators affect populations of the prey animals? The answer is not as simple as might be thought. Moose reached Isle Royale in Lake Superior by crossing over winter ice and multiplied freely there in isolation without predators. When wolves later reached the island, naturalists widely assumed that the wolves would play a key role in controlling the moose population. Careful studies have demonstrated, however, that this is not the case. The wolves eat mostly old or diseased animals that would not survive long anyway. In general, the moose population is controlled by food availability, disease and other factors rather than by wolves.

When experimental populations are set up under simple laboratory conditions, the predator often exterminates its prey and then becomes extinct itself, having nothing left to eat. However, if safe areas like those prey animals have in the wild are provided, the prey population drops to low level but not extinction. Low prey population levels then provide inadequate food for the predators, causing the predator population to decrease. When this occurs, the prey population can rebound. In this situation the predator and prey population may continue in this cyclical pattern for some time.

Population cycles are characteristic of small mammals, and they sometimes appear to be brought about by predators. Ecologists studying hare populations have found that the North American snow shoe hare follows a roughly ten-year cycle. Its numbers fall tenfold to thirty in a typical cycle, and a hundredfold change can occur. Two factors appear to be generating the cycle: food plants and predators.

The preferred foods of snowshoe hares are willow and birch twigs. As hare density increases, the quantity of these twigs decreases, forcing the hares to feed on low-quality high-fiber food. Lower birth rates, low juvenile survivorship, and low growth rates follow, so there is a corresponding decline in hare abundance. Once the hare population has declined, it takes two to three years for the quantity of twigs to recover.

A key predator of the snowshoe hare is the Canada lynx. The Canada lynx shows a ten-year cycle of abundance that parallels the abundance cycle of hares. As hare numbers fall, so do lynx numbers, as their food supply depleted.

What causes the predator-prey oscillations? Do increasing number of hares lead to overharvesting of plants, which in turn results in reduced hare populations, or do increasing numbers of lynx lead to overharvesting hares? Field experiments carried out by Charles Krebs and coworkers in 1992 provide an answer. Krebs investigated experimental plots in Canada's Yukon territory that contained hare populations. When food was added to those plots (no food effect) and predators were excluded (no predator effect) from an experimental area, hare numbers increased tenfold and stayed there—the cycle was lost. However, the cycle was retained if either of the factors was allowed to operate alone: if predators were excluded but food was not added (food effect alone), or if food was added in the presence of predators (predator effect alone). Thus both factors can affect the cycle, which, in practice, seems to be generated by conjunction of the two factors.

Predators are an essential factor in maintaining communities that are rich and diverse in species. Without predators, the species that is the best competitor for food, shelter, nesting sites, and other environmental resources tends to dominate and exclude the species with which it competes. ■ This phenomenon is known as "competitor exclusion." ■ However, if the community contains a predator of the strongest competitor species, then the population of that competitor is controlled. ■ Thus even the less competitive species are able to survive. ■ For example, sea stars prey on a variety of bivalve mollusks and prevent these bivalves from monopolizing habitats on the sea floor. This opens up space for many other organisms. When sea stars are removed, species diversity falls sharply. Therefore, from the stand point of diversity, it is usually a mistake to eliminate a major predator from a community.

1. **In paragraph 1, why does the author discuss the moose and wolves on Isle Royale?**
  - (A) To provide an example of predators moving to new habitats by following migrating prey
  - (B) To show that the interactions between predator populations and prey populations are not always might be expected
  - (C) To suggest that prey populations are more influenced by predation than food availability and disease
  - (D) To argue that studies of geographically isolated populations tend not to be useful to naturalists
2. **The word “rebound” in the passage is closest in meaning to**
  - (A) escape
  - (B) recover
  - (C) survive
  - (D) resist
3. **Paragraph 2 implies which of the following about experimental environments in which predators become extinct?**
  - (A) They may yield results that do not accurately predict changes of populations in the wild.
  - (B) In these environments, the prey species is better adapted than the predator species.
  - (C) These environments are appropriate only for studying small populations of predators and prey.
  - (D) They are unrealistic because some predators are also the prey of other predators.
4. **Which of the following can be inferred from paragraphs 2 and 3 about the small mammals that experience population cycles?**
  - (A) Their population cycles are not affected by predators.
  - (B) Their predators’ populations periodically disappear.
  - (C) They typically undergo ten-year cycles.
  - (D) They have access to places safe from predators.
5. **The word “roughly” in the passage is closest in meaning to**
  - (A) usually
  - (B) repeating
  - (C) approximately
  - (D) observable
6. **The word “generating” in the passage is closest in meaning to**
  - (A) producing
  - (B) changing
  - (C) speeding up
  - (D) smoothing out
7. **According to paragraph 4, all of the following are true of the food of snowshoe hares EXCEPT**
  - (A) The preferred food for hares consists of willow and birch twigs.
  - (B) High fiber food is the most nutritious for hares.
  - (C) Depletion of the supply of willow and birch twigs cause low birth and growth rates.
  - (D) The food supply takes two or three years to recover after a peak in hare population density.
8. **The word “conjunction” in the passage is closest in meaning to**
  - (A) determination
  - (B) combination
  - (C) alternation
  - (D) transformation
9. **According to paragraph 5, which of the following statements best characterizes the abundance cycle of the Canada lynx?**
  - (A) It closely follows the cycle the snowshoe hare.
  - (B) When the numbers of lynx fall, the numbers of snowshoe hares soon decrease.
  - (C) When hare numbers decrease, lynx numbers increase.
  - (D) It is not clearly related to the availability of lynx food.
10. **According to paragraph 6, which of the following was true of the hare population cycle in Krebs’s experiment?**

- (A) The effects of providing food while at the same time introducing predators cancelled each other, so there was no cycle.
- (B) The cycle existed when either the food supply was limited or there were predators.
- (C) There was a cycle when there were no predators and food was supplied.
- (D) If the hares had places to hide from the lynx, the hare population increased tenfold and then remained at that level.

**11. According to paragraph 7, which of the following statements correctly characterizes the effect of sea stars on the ecosystem in which they are predators of bivalves?**

- (A) Bivalve population are kept low, allowing species that compete with bivalves to survive.
- (B) The numbers of most species of bivalves are greatly reduced, leaving the bivalve species that is the strongest competitor to dominate among the survivors.
- (C) Biological diversity begins to decrease because many bivalve species disappear.
- (D) Sea stars dominate at first but then die off because of the depleted food supply.

**12. According to paragraph 7, which of the following is true of the phenomenon of competitor exclusion?**

- (A) It results in more diverse communities.
- (B) It requires the presence of predators.
- (C) It affects all competitions equally.
- (D) It happens only when there is a dominant competitor.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

As a result, there are not enough of the strong competitions to monopolize the environment's resources.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The relationships between predators and prey are complex.

**Answer choices**

- (A) Studies of the interactions between wolves and moose on Isle Royale in Lake Superior reveal that wolf predation is not the primary factor controlling the moose population.
- (B) Predators help maintain biological diversity by limiting populations of a dominant competitor species, thereby preventing that species from excluding others.
- (C) A species' population tends to rise and falls in a cycle pattern if the food supply for the population is limited, or if the population has a major predator.
- (D) Ecologists are interested in studying predator-prey population cycles because understanding how predators and prey interact will allow better wildlife management programs.
- (E) In predator-prey population cycles, predator populations increase or decrease following similar population changes in the species they prey on.
- (F) The removal of sea stars reduces the diversity of the community in which they are predators, and is therefore a bad idea.

### 参考答案与解析

1. 选 **B**。对应文章的第四句，这句话前面说人们觉得狼对控制鹿的数量控制起到了重要作用，而这句话对其进行了否定，对应了 B 选项。A 与原文没有关系，C 与原文第一段最后一句话矛盾，D 也不对。
2. 选 **B**。rebound 反弹，答案是 recover。
3. 选 **A**。第一句说了 experimental environments 的结果，但后面立刻出现了 however，证明出现了转折，后文在一定程度上否定了前面的观点，所以选 A。B 和原文主题没关系，C 虽然没有明显错误，但没有表现出真正的主题，重点是在真实生活中的情况。D 原文也没提到。
4. 选 **D**。A 错误，对应第三段最后一句；B 错误，对应第二段的第二句话之后，证明在正常情况下捕食者不会消失。C 对应第三段第二句，出现了 ten-year cycle 但是仅仅是对野兔的描写，并不适用与全部哺乳动物。D 对应第二段第二句，说被捕食者在现实生活中可以居于安全的远离捕食者的地方，所以选 D。
5. 选 **C**。roughly 粗略地，答案是 approximately。
6. 选 **A**。generate 产生，答案为 producing。
7. 选 **B**。排除题，选项 A 对应第一句，正确。选项 B 对应第二句，原文说 high-fiber 意味着 low quality，所以 B 错误，选。C 对应第三句，正确，不选。D 对应最后一句，正确，不选。
8. 选 **A**。原文说由于野兔是山猫的食物，所以野兔数量下降，山猫数量也会随之下降，所以选择 A。B 的逻辑关系不对，并非野兔跟着山猫变化。C 更不对，两者数量是同时增减的。D 也不符合原文。
9. 选 **B**。这句话的前一句说两个因素都会影响这个循环，而在现实中，两个因素都存在。所以这里应该是共同作用的意思，所以 B 符合原义。A 是决定，C 是交替，D 是转化。
10. 选 **B**。总结就是两个因素只要其中一个存在就会导致 cycle，两个同时都没有的时候，就不存在 cycle 了。所以 A 说 no cycle，那么条件中就多出了 food effect，错误不选。B 正确，两因素都不存在，no cycle，选。C 说 cycle 存在，可是两因素都不存在。D 跟两个因素都没关系，不选。
11. 选 **A**。对应原文这段倒数第二句和第三句，说海星的存在对双壳动物是一个限制，使得别的生物有了生存的空间，符合 A。B 不对，双壳动物并不是 dominate。C 不对，bivalve 控制后，diversity 应该是上升的。D 也不对，海星没死。
12. 选 **D**。根据 competitor exclusion 定位，这句话说明 this phenomenon，那么对于现象描写应该在前面。往前找可以看到这个现象是要在 best competitor 存在的情况，这个竞争者还 tend to dominate，符合 D。A 并不是这个现象的直接作用，其直接作用是对其他 competitor 的限制。B 虽然正确，但没指出其唯一性。C 没提到。
13. 选 **C**。这里说 as a result，那么首先前面要对某个现象进行描写，后面要对 there are not enough of the strong competitors to monopolize the environment's resources 进行递进，只有 C 符合。
14. 选 **CDE**。A 对应原文 1-3 段，虽然到第二段为止，都是符合这个选项的，但是第三段已经对这个进行了否定。错误，不选；B 虽然意思正确，但是原文没有提到生态学家要研究捕食者和被捕食者的关系的目的，不选；C 正确，选，对应原文最后一段；D 正确，选，原文第二段已经表达这句话了，后面也不断地重复；E 正确，选，对应原文倒数第二段；F 选项缺少了一环——双壳动物，语义表达不完整，不选。

### 笔记区

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**Groundwater**

Most of the world's potable water—freshwater suitable for drinking—is accounted for by groundwater, which is stored in the pores and fractures in rocks. There is more than 50 times as much freshwater stored underground than in all the freshwater rivers and lakes at the surface. Nearly 50 percent of all groundwater is stored in the upper 1,000 meters of Earth. At greater depths within Earth, the pressure of the overlying rock causes pores and cracks to close, reducing the space that pore water can occupy, and almost complete closure occurs at a depth of about 10 kilometers. The greatest water storage, therefore, lies near the surface.

*Aquifers, Porosity and Permeability*

Groundwater is stored in a variety of rock types. A groundwater reservoir from which water can be extracted is called an aquifer. We can effectively think of an aquifer as a deposit of water. Extraction of water depends on two properties of the aquifer: porosity and permeability. Between sediment grains are spaces that can be filled with water. This pore space is known as porosity and is expressed as a percentage of the total rock volume. Porosity is important for water-storage capacity, but for water to flow through rocks, the pore spaces must be connected. The ability of water, or other fluids, to flow through the interconnected pore spaces in rocks is termed permeability. In the intergranular spaces of rocks, however, fluid must flow around and between grains in a tortuous path; this winding path causes a resistance to flow. The rate at which the flowing water overcomes this resistance is related to the permeability of rock.

Sediment sorting and compaction influence permeability and porosity. The more poorly sorted or the more tightly compacted a sediment is, the lower its porosity and permeability. Sedimentary rocks—the most common rock type near the surface—are also the most common reservoirs for water because they contain the most space that can be filled with water. Sandstones generally make good aquifers, while finer-grained mudstones are typically impermeable. Impermeable rocks are referred to as aquicludes. Igneous and metamorphic rocks are more compact, commonly crystalline, and rarely contain spaces between grains. However, even igneous and metamorphic rocks may act as groundwater reservoirs if extensive fracturing occurs in such rocks and if the fracture system is interconnected.

*The Water Table*

The water table is the underground boundary below which all the cracks and pores are filled with water. In some cases, the water table reaches Earth's surface, where it is expressed as rivers, lakes and marshes. ■ Typically, though, the water table may be tens or hundreds of meters below the surface. ■ The water table is not flat but usually follows the contours of the topography. ■ Above the water table is the vadose zone, through which rainwater percolates. ■ Water in the vadose zone drains down to the water table, leaving behind a thin coating of water on mineral grains. The vadose zone supplies plant roots near the surface with water.

Because the surface of the water table is not flat but instead rises and falls with topography, groundwater is affected by gravity in the same fashion as surface water. Groundwater flows downhill to topographic lows. **If the water table intersect the land surface, groundwater will flow out onto the surface at springs, weather to be collected there or to subsequently flow farther along a drainage.** Groundwater commonly collects in stream drainages but may remain entirely beneath the surface of dry stream-beds in arid regions. In particularly wet years, short stretches of an otherwise dry stream-bed may have flowing water because the water table rises to intersect the land surface.

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**Sediment:** Materials (such as sand or small rocks) that are deposited by water, wind, or glacial ice

**Topography:** The shape of a surface such as Earth's, including the rise and fall of such features as mountains and valleys

1. In paragraph 1, why does the author mention “the pressure of the overlying rock”?
  - (A) To show how water can be forced deep under Earth’s surface
  - (B) To show why groundwater is more plentiful than surface freshwater
  - (C) To correct a commonly made error about the location of groundwater
  - (D) To explain why most groundwater lies near Earth’s surface
2. According to paragraph 1, groundwater differs from the water in rivers and lakes in terms of its
  - (A) portability
  - (B) usefulness
  - (C) abundance
  - (D) cost
3. The word “extracted” in the passage is closest in meaning to
  - (A) used
  - (B) poured
  - (C) removed
  - (D) kept out
4. The word “termed” in the passage is closest in meaning to
  - (A) considered
  - (B) called
  - (C) limited to
  - (D) caused by
5. According to paragraph 2, what does porosity determine?
  - (A) The rate at which the aquifer’s water overcomes resistance to flow
  - (B) The amount of water that the aquifer can hold
  - (C) The likelihood that fractures and joints will occur in the aquifer
  - (D) The depth underground at which the aquifer lies
6. The word “compacted” in the passage is closest in meaning to
  - (A) hard
  - (B) compressed
  - (C) heavy
  - (D) deeply buried
7. According to paragraph 3, when can igneous rock serve as an aquifer?
  - (A) When it has many connected fractures
  - (B) When it lies next to metamorphic rock
  - (C) When it lies relatively near the surface
  - (D) When it is crystalline
8. According to paragraph 3, what is the relationship between permeability and porosity?
  - (A) The more pores a rock has, the higher its porosity but the lower its permeability.
  - (B) Rocks with many internal spaces that are not connected with each other will have high porosity but low permeability.
  - (C) If water flows through a rock easily, it has high permeability but low porosity.
  - (D) Rocks that have high permeability have high porosity and vice versa.
9. The word “coating” in the passage is closest in meaning to
  - (A) stream
  - (B) barrier
  - (C) amount
  - (D) layer
10. Paragraph 4 implies which of the following about the roots of plants?
  - (A) They prevent water from reaching the vadose zone.
  - (B) They mark the boundary between the vadose zone and the water table.
  - (C) They do not typically get their water from the water table.
  - (D) They help keep the water table from dropping farther.

**11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Groundwater only flows out of the ground if the water table intersects the land surface.
- (B) If the land surface and the water table intersect, groundwater can flow underground.
- (C) Groundwater may be drained if springs occur where the water table intersects the land surface.
- (D) Where the water table meets the land surface, groundwater flows out through surface springs.

**12. Paragraph 5 implies which of the following about the level of the water?**

- (A) It may rise or fall from year to year, depending on annual rainfall.
- (B) It does not vary in arid regions.
- (C) It rarely intersects the land surface of most regions.
- (D) It is unrelated to the rate at which groundwater flows.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This is a consequence of the slow rate of movement of the groundwater, which often prevents the water table from attaining a flat (horizontal) level.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Most of the world's potable water is stored as groundwater in the pores and fractures of underground rock, much of it at depths of less than 1,000 meters.

**Answer choices**

- (A) Sedimentary rock may make poor aquifers because of tightly compacted sediment, which reduces porosity and permeability.
- (B) Porosity is a measure of the empty space within rock while permeability measures the degree to which water can flow freely through rock.
- (C) In arid regions, the water tables remain at a constant level far below the surface, preventing stream-beds from filling up even during wet years.
- (D) Groundwater reservoirs are characterized by the porosity and permeability of the rock in which they lie, and these factors vary according to the type of rock.
- (E) The vadose zone is typically dry because water does not stay in it, but instead percolates down to aquifers below or drains out through springs and streams.
- (F) Although the water table usually follows the contours of the land surface, its level may vary from year to year and may intersect to the surface in places.

### 参考答案与解析

1. 选 **D**。本段的最后一句出现了 *therefore*，这里也是在说 *the pressure of the overlying rock* 导致的结果，也就是文章提到它的目的。其结果是，大部分的水都存储在比较表面的地方，所以其目的就是要解释为什么水都在表面的地方。
2. 选 **C**。对应原文第二句话，也就是将地下水和江河湖泊水进行比较的那句话。原句说 *more than 50 times*，即地下水的水量大。这里 A 是饮用性，原文并没有说江水不能喝；B 是有用，同理；D 是代价，这个就更没提到了。
3. 选 **C**。*extract* 提取、取出，答案是 *removed*。
4. 选 **B**。*term* 术语（名词），因此答案是 *called*。
5. 选 **B**。A 决定于 *permeability of rock*，对应本段最后一句。B 正确，对应本段第七句（*porosity is important for water-storage capacity*），这句话只要根据 *porosity* 定位就很好找。C 和 *porosity* 没有直接关系。D 原文就没提到。
6. 选 **B**。*compact* 压缩，选 *compressed*。
7. 选 **A**。对应本段文章最后一句 *even igneous rocks may act as groundwater*，后半句给出的就是答案，那么它说的是要有 *fractures* 并且要 *interconnected*，所以选 A。
8. 选 **B**。对应本段第一句和第二句，即 *sorting* 和 *compaction* 会共同影响 *permeability*，结合上一段的最后一句理解，多孔性分为两种情况，一种是孔多但是互不联通，这时 *permeability* 不高；另一种是孔多并且互相联通，那么 *porosity* 高的同时 *permeability* 也会高，因此选 B，其他几个选项的叙述都不完整，这两者的关系并不是简单的正比例。
9. 选 **D**。*coating* 涂层，答案是 *layer*。
10. 选 **C**。根据 *plant roots* 定位到本段最后一句，说 *vadose zone* 给植物根部提供了水。选项 ABD 都没提到，而只有 C 没有错误，因为 *plant roots* 是从 *vadose zone* 汲取的水分，而不是 *water table*。
11. 选 **D**。A 缺少了 *spring* 这个条件；BC 选项不正确；D 包含了原文所有的主干部分，正确。
12. 选 **A**。根据这段最后两句关于 *wet year* 的描写可得出根据降雨量不同，地下水位是有变化的，所以 A 正确。B 不正确，原文明显提出在 *arid regions* 降雨量多时干燥的溪床会有水。C 也不对，整段都有大篇幅在写和 *land surface* 的 *intersects*。D 原文没提到。
13. 选 **C**。要插入的句子说 *this is a consequence*，那么 *this* 一定指代什么，根据后半句可以知道指代的内容应该与地下水位不是平面有关。所以 C 的位置符合，因为前一句说地下水位不是平面。
14. 选 **BCF**。A 错误，对应文章第三段第三句有关 *sedimentary rock* 的描写，*sedimentary rock* 是很好的 *aquifers*；B 正确，对应第二段前四句；C 正确，对应第二段；D 错误，*vadose zone* 中会留下 *thin coating* 所以还是会湿润，对应原文第四段；E 错误，*water table* 本非 *remain at a constant level*，根据倒数第二句，地下水位有时会与地表交叉；F 正确，对应最后一段。

### 笔记区

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## Early Saharan Pastoralists

The Sahara is a highly diverse, albeit dry, region that has undergone major climatic changes since 10,000 B.C. As recently as 6,000 B.C. the southern frontier of the desert was far to the north of where it is now, while semiarid grassland and shallow freshwater lakes covered much of what are now arid plains. This was a landscape where antelope of all kinds abounded—along with *Bos primigenius*, a kind of oxen that has become extinct. The areas that are now desert were, like all arid regions, very susceptible to cycles of higher and lower levels of rainfall, resulting in major, sudden changes in distributions of plants and animals. The people who hunted the sparse desert animals responded to drought by managing the wild resources they hunted and gathered, especially wild oxen, which had to have regular water supplies to survive.

Even before the drought, the Sahara was never well watered. Both humans and animals were constantly on the move, in search of food and reliable water supplies. Under these circumstances, archaeologist Andrew Smith believes, the small herds of *Bos primigenius* in the desert became smaller, more closely knit breeding units as the drought took hold. The beasts were more disciplined, so that it was easier for hunters to predict their habits, and capture animals at will. At the same time, both cattle and humans were more confined in their movements, staying much closer to permanent water supplies for long periods of time. As a result, cattle and humans came into close association.

Smith believes that the hunters were well aware of the more disciplined ways in which their prey behaved. ■ Instead of following the cattle on their annual migrations, the hunters began to prevent the herd from moving from one spot to another. ■ At first, they controlled the movement of the herd while ensuring continuance of their meat diet. ■ But soon they also gained genetic control of the animals, which led to rapid physical changes in the herd. ■ South African farmers who maintain herds of wild eland (large African antelopes with short, twisted horns) report that the offspring soon diminish in size, unless wild bulls are introduced constantly from outside. The same effects of inbreeding may have occurred in controlled cattle populations, with some additional, and perhaps unrecognized, advantages. The newly domesticated animals behaved better, were easier to control, and may have enjoyed a higher birth rate, which in turn yielded greater milk supplies. We know from rock paintings deep in the Sahara that the herders were soon selecting breeding animals to produce offspring with different horn shapes and hide colors.

It is still unclear whether domesticated cattle were tamed independently in northern Africa or introduced to the continent from southwest Asia. **Whatever the source of the original tamed herds might have been, it seems entirely likely that much the same process of juxtaposition (living side by side) and control occurred in both southwest Asia and northern Africa, and even in Europe, among peoples who had an intimate knowledge of the behavior of wild cattle.** The experiments with domestication probably occurred in many places, as people living in ever-drier environments cast around for more predictable food supplies.

The cattle herders had only a few possessions: unsophisticated pots and polished *adzes*\*. They also hunted with bow and arrow. The Saharan people left a remarkable record of their lives painted on the walls of caves deep in the desert. Their artistic endeavors have been preserved in paintings of wild animals, cattle, goats, humans, and scenes of daily life that extend back perhaps to 5,000 B.C. The widespread distribution of pastoral sites of this period suggests that the Saharans ranged their herds over widely separated summer and winter grazing grounds.

About 3,500 B.C., climatic conditions again deteriorated. The Sahara slowly became drier and lakes vanished. On the other hand, rainfall increased in the interior of western Africa, and the northern limit of the tsetse fly, an insect fatal to cattle, moved south. So the herders shifted south, following the major river systems into savanna regions. By this time, the Saharan people were probably using domestic crops, experimenting with such summer rainfall crops as sorghum and millet as they move out of areas where they could grow wheat, barley, and other Mediterranean crops.

\***Adzes:** Cutting tools with blades set at right angles to the handle

1. **According to paragraph 1, what was true of the Sahara region around 6,000 B.C.?**
  - (A) Much less of it was desert than is now the case.
  - (B) Most areas that are now grassland were covered by shallow lakes.
  - (C) It had just undergone a major climatic change.
  - (D) Wild oxen and antelopes lived in separate parts of the region.
2. **The word “albeit” in the passage is closest in meaning to**
  - (A) usually
  - (B) almost
  - (C) though
  - (D) rather
3. **According to paragraph 1, which of the following is true of all arid regions?**
  - (A) They include at least some freshwater lakes.
  - (B) They have similar distributions of plants and animals.
  - (C) They are greatly affected by changes in the amount of rain they receive.
  - (D) They have frequent droughts that make it difficult to manage the wild resources.
4. **Paragraph 2 supports which of the following ideas about wild oxen in the Sahara region after the drought took hold?**
  - (A) They traveled in smaller herds.
  - (B) They were harder for hunters to capture.
  - (C) They tended to be significantly smaller in size.
  - (D) They moved along less predictable routes.
5. **According to paragraph 2, what was it that brought cattle and humans into close association?**
  - (A) The development of smaller breeding units within hers.
  - (B) Cattle and humans staying close to permanent water supplies for long period of time.
  - (C) The development of greater discipline among cattle.
  - (D) Cattle and humans constantly on the move searching for food and reliable water supplies.
6. **Why does the author mention the “rock paintings deep in the Sahara”?**
  - (A) To help explain why the hunters wanted to control the herds
  - (B) To provide support for the idea that the herders soon gained genetic control of the cattle
  - (C) To show that the herders had artistic as well as practical abilities
  - (D) To argue that the herders soon began to value their cattle for more than food
7. **According to paragraph 3, all of the following statements were true of newly domesticated animals EXCEPT**
  - (A) They were controlled more easily by the farmers.
  - (B) They produced a larger number of offspring.
  - (C) They produce more milk.
  - (D) They were larger in size.
8. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Regardless of where the first tamed herds came from, people tried to control them by living in juxtaposition with them.
  - (B) Regardless of where the first tamed herds came from, they resulted from the same process of juxtaposition and control by people who understood the behavior of wild cattle.
  - (C) People who had an intimate knowledge of the behavior of wild cattle moved closer together to cooperate in taming the herd, regardless of where they found them.
  - (D) The process of taming herds was certainly the same in southwest Asia, northern Africa, and Europe because people knew a lot about the behavior of wild cattle, regardless of where they lived.
9. **According to paragraph 5, each of the following was true about the early Saharan people EXCEPT**
  - (A) They had few possessions apart from cattle.
  - (B) After about 5,000 B.C., they lived primarily in caves that were located deep in the desert.
  - (C) Between the summer and winter seasons, they moved their herds over long distances.

(D) They painted animals and scenes of daily life on the walls of caves.

**10. The word “endeavors” in the passage is closest in meaning to**

- (A) methods
- (B) styles
- (C) scenes
- (D) efforts

**11. The word “deteriorated” in the passage is closest in meaning to**

- (A) became unstable
- (B) caused hardship
- (C) changed completely
- (D) got worse

**12. According to paragraph 6, what allowed the herders to shift south into the savanna regions after about 3,500 B.C.?**

- (A) They could easily grow Mediterranean crops in those regions.
- (B) They could more easily domesticate sorghum and millet in those regions.
- (C) The tsetse fly was no longer a problem in those regions.
- (D) The river systems in those regions provided reliable sources of water in the summer.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This knowledge enabled the hunters to adopt a different approach to hunting.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

As recently as 6,000 B.C., much of the Sahara region was semiarid grassland where humans hunted wild oxen and antelope.

**Answer choices**

- (A) There was enough freshwater for Saharan peoples to move freely throughout the region without having to manage the resources they hunted and gathered.
- (B) Once Saharans controlled the breeding of their cattle, the characteristics of the cattle changed rapidly, increasing their reproductive rate and milk production.
- (C) Although the Saharan peoples were remarkably sophisticated artists, they had only a few simple possessions, like adzes and the bows and arrows they used for hunting.
- (D) When the drying climate forced cattle and humans close to each other in areas with water supplies, humans gained control over the cattle and eventually domesticated them.
- (E) Herders soon began selecting breeding animals to produce offspring with different horn shapes and hide colors, although the advantage of controlled inbreeding were not apparent to them at first.
- (F) As the drought worsened around 3,500 B.C. and conditions for herders became more favorable to the south, the Saharan people moved into savanna regions, where they grew different crops.

### 参考答案与解析

1. 选 **A**。原文写到“在公元前六千年左右，在沙漠的南边界，远离北边的地方现在是干旱的平原，当时这里是各种羚羊和原始牛都很丰富的山水画般的地方。”那么也就是说那时候那个地方还不是沙漠。所以 A，当时沙漠要比现在少，正确。B 现在没有 grassland。C 并没说这个改变是在公元前 6000 年发生的。D 通过 along with 可以知道这两种动物是生活在一起的。
2. 选 **C**。albeit 尽管，同 though。
3. 选 **C**。根据 all arid region 定位，选项 A 错误，原文没说。B，原文虽然提到了 distribution of plants，但是并没说所有的干燥地区这一点都是相似的。C 正确，原文说 very susceptible to higher and lower levels of rainfall。D 错误，最后一句说人们因此而开始 manage resources。
4. 选 **A**。选项 A 对应文章第三句和第四句。根据原文说这种牛群体更小了，繁殖的单位更小，被驯化了，更容易被预测，所以 BD 错误，C 原文没提到，只说其群体变小。
5. 选 **B**。根据 close association 定位到最后一句，但这句说 as a result，那么原因就在前面一句。前一句说 cattle human 都 staying much closer to permanent water supplies，完美地对应了 B。
6. 选 **B**。这个例子之前一直在说 herders gained genetic control 和其影响，然后给出这个例子，后面的内容也在说放牧人是如何进行基因控制的。所以应该选 B。
7. 选 **D**。根据 domesticated animals 定位到这一段后半部分，只有 D 没提到，所以选 D。
8. 选 **B**。这里的主干内容是，不管驯化动物从哪起源，最后在不同的地区得到的都是同样的方法：juxtaposition, control。根据以上信息对选项进行排除：A 前半句没问题，后半句和原文关系不符；B 正确，包括了所有主干部分；C 完全和原文说的不是一回事；D 原文并没有因果关系。
9. 选 **B**。A 对应第一句，除了牛，他们还有住所和斧头。C 对应最后一句。D 对应第三句。B，原文虽然说到他们在沙漠深处的洞穴里画画了，但是没说他们住那，所以不对，选 B。
10. 选 **D**。endeavor 努力，答案选 efforts。
11. 选 **D**。deteriorate 恶化，选 got worse 最贴切。
12. 选 **C**。根据 move south 和 savanna region 定位，这句话开头出现 So，那证明前一句就是原因。前一句说西部降水变多了，且 northern limit of the tsetse fly moved south，所以牛群也 move south，对应了 C 选项。D 可能是个迷惑选项，但是按原文的意思，river 只是牛迁徙的路径 following，但并不是原因。
13. 选 **A**。需要插入的句子说“这个知识使得猎人改变了打猎的方法”，那么前面应该说猎人得到了什么知识，后面应该说这个方法怎么改变了。
14. 选 **BCF**。A 错误，原文说因为干旱，所以农民开始 manage the resources，对应原文第一段最后一句；B 正确，对应第二段最后几句，说人和动物建立了联系，并且后文不断描写 domestication 的过程；C 正确，对应原文第三段；D 前半句正确，但后半句不对，在他们选中种畜之后，已经明确知道了好处；E 虽然这内容文章都有提到，但是并没有 although 这样的逻辑变化，所以不选；F 正确，对应文章最后一段。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



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**Buck Rubs and Buck Scrapes**

A conspicuous sign indicating the presence of white-tailed deer in a woodlot is a buck rub. ■ A male deer makes a buck rub by stripping the bark (outer layer) of a small tree with its antlers. ■ When completed, the buck rub is an obvious visual signal to us and presumable to other deer in the area. ■ A rub is usually located at the shoulder height of a deer (one meter or less above the ground) on a smooth-barked, small-diameter (16–25 millimeters) tree. ■ The smooth bark of small red maples makes this species ideal for buck rubs in the forests of the mid-eastern United States.

Adult male deer usually produce rubs in late summer or early autumn when the outer velvet layer is being shed from their antlers. Rubs are created about one to two months before the breeding season (the rut). Hence for a long time biologists believed that male deer used buck rubs not only to clean and polish antlers but also to provide practice for the ensuing male-to-male combat during the rut. However, biologists also noted deer sniff and lick an unfamiliar rub, which suggests that this visual mark on a small tree plays an important communication purpose in the social life of deer.

Buck rubs also have a scent produced by glands in the foreheads of deer that is transferred to the tree when the rub is made. These odors make buck rubs an important means of olfactory communication between deer. The importance of olfactory communication (using odors to communicate) in the way of life of deer was documented by a study of captive adult male deer a few decades ago, which noted that males rubbed their foreheads on branches and twigs, especially as autumn approached. A decade later another study reported that adult male white-tailed deer exhibited forehead rubbing just before and during the rut. It was found that when a white-tailed buck makes a rub, it moves both antlers and forehead glands along the small tree in a vertical direction. This forehead rubbing behavior coincides with a high level of glandular activity in the modified scent glands found on the foreheads of male deer; the glandular activity causes the forehead pelage (hairy covering) of adult males to be distinctly darker than in females or younger males.

Forehead rubbing by male deer on buck rubs presumably sends a great deal of information to other members of the same species. First, the chemicals deposited on the rub provide information on the individual identity of an animal; no two mammals produce the same scent. For instance, as we all know, dogs recognize each other via smell. Second, because only male deer rub, the buck rub and its associated chemicals indicate the sex of the deer producing the rub. Third, older, more dominant bucks produce more buck rubs and probably deposit more glandular secretions on a given rub. Thus the presence of many well-marked rubs is indicative of older, higher-status males being in the general vicinity rather than simply being a crude measure of relative deer abundance in a given area. The information conveyed by the olfactory signals on a buck rub make it the social equivalent of some auditory signals in other deer species, such as trumpeting by bull elk.

Because both sexes of white-tailed respond to buck rubs by smelling and licking them, rubs may serve a very important additional function. Fresher buck rubs (less than two days old), in particular, are visited more frequently by adult females than older rubs. In view of this behavior it has been suggested that chemicals present in fresh buck rubs may help physiologically induce and synchronize fertility in females that visit these rubs. This would be an obvious advantage to wide-ranging deer, especially to a socially dominant buck when courting several adult females during the autumn rut. Another visual signal produced by while-tailed deer is termed a buck scrape. Scrapes consist of a clearing (about 0.5 meter in diameter) and shallow depression made by pushing aside the leaves covering the ground; after making the scrape, the deer typically urinates in the depression. Thus, like a buck rub, a scrape is both a visual and an olfactory signal. Buck scrapes are generally created after leaf-fall in autumn, which is just before or during the rut. Scrapes are usually placed in open or conspicuous places, such as along a deer trail. Most are made by older males, although females and younger males (2.5 years old or less) occasionally make scrapes.

1. The word “conspicuous” in the passage is closest in meaning to
  - (A) noticeable
  - (B) common
  - (C) strange
  - (D) particular
2. According to paragraph 1, why are small red maple trees ideal for buck rubs?
  - (A) They have smooth bark.
  - (B) They are found in the mid-eastern United States.
  - (C) They grow very slowly.
  - (D) They tend to grow in open spaces.
3. The studies of forehead rubbing by deer described in paragraph 3 showed that
  - (A) forehead rubbing encourages the growth of antlers
  - (B) mule deer and white-tailed deer behave differently during the rut
  - (C) the rut can occur at different times of the year
  - (D) deer convey important information through scent
4. The word “exhibited” in the passage is closest in meaning to
  - (A) relied on
  - (B) increased
  - (C) displayed
  - (D) preferred
5. Why does the author mention that “dogs recognize each other via smell”?
  - (A) To point out the similarities between dogs and deer
  - (B) To argue that animals communicate through scent rather than through vision
  - (C) To support the claim that the scent of a buck rub serves to identify its maker to other deer
  - (D) To suggest that buck rubs can be detected by other species
6. The word “crude” in the passage is closest in meaning to
  - (A) rough
  - (B) useful
  - (C) necessary
  - (D) obvious
7. What can be inferred from paragraph 4 about the trumpeting of bull elk?
  - (A) Trumpeting by higher-status bull elk signals their presence to other members of their species.
  - (B) Bull elk need to combine trumpeting with olfactory signals to convey information about their identity.
  - (C) Trumpeting alerts white-tailed deer to the presence of bull elk in their vicinity.
  - (D) Trumpeting provides a better measure of deer presence in a given area than buck rubs do.
8. According to paragraph 4, the buck rubs occurring in a given area reveal all of the following information about deer EXCEPT
  - (A) the individual identity of the deer
  - (B) the gender of the deer
  - (C) the likely social status of the deer
  - (D) the number of deer in the vicinity
9. The word “induce” in the passage is closest in meaning to
  - (A) increase
  - (B) extend
  - (C) delay
  - (D) stimulate
10. According to paragraph 5, which of the following is true about chemicals in buck rubs?
  - (A) They have to be at least two days old for females to be able to detect them.
  - (B) They are more effective in older buck rubs than in fresher ones.
  - (C) They may affect fertility in female deer.
  - (D) They can be more easily detected by young males than adult females.
11. The word “termed” in the passage is closest in meaning to

- (A) associated with
- (B) visible as
- (C) known as
- (D) provided by

**12. According to the passage, in what way do buck scrapes differ from buck rubs?**

- (A) Buck scrapes are made by both male and female deer.
- (B) Buck scrapes are purely visual signals.
- (C) Buck scrapes are made closer to the breeding season than buck rubs.
- (D) Buck scrapes can be smelled only by deer.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This process can take a few hours to several days.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Buck rubs and buck scrapes are two types of markings made by white-tailed deer.

**Answer choices**

- (A) The observation that deer sniff and lick buck rubs first led scientists to connect buck rubs with combat between adult males during the breeding season.
- (B) Buck rubs and buck scrapes are visual signals and smells that deer use to communicate a variety of information to other deer.
- (C) The number of buck rubs and buck scrapes in a given area changes as the density of the population of male deer in the area changes.
- (D) As they rub the bark from trees, male deer leave behind chemicals produced by the glands in their foreheads, creating a scent that other deer can detect.
- (E) The height of a buck rub, the type of tree used, and the direction in which the deer applies the rub can give different kinds of information to other deer.
- (F) Buck rubs are created close to the breeding season of deer and may affect the timing of fertility in the female deer that visit the rubs.

### 参考答案与解析

1. 选 **A**。conspicuous 显眼的，答案 noticeable。
2. 选 **A**。根据 small red maple tree 定位，这句话的主语其实是 The smooth bark，因此 they have smooth bark 才是成为理想对象的重要条件。
3. 选 **D**。根据 forehead 定位到这段的第一句。这句话说会留下气味，后一句说了气味的作用是 communication，所以 D 符合。
4. 选 **C**。exhibit 展现，答案是 display。
5. 选 **C**。这句话是由 for instance 引出的，而这一段的总论点就是第一句话，send information to other members；first 后面是第一个分论点。所以答案应该跟这两句有关，因此选 C，气味可以帮助 identify。
6. 选 **A**。crude 粗糙的，答案当然是 rough。
7. 选 **A**。根据 trumpeting of bull elk 定位到这一段最后一句，这里 trumpeting by bull elk 是个例子，那么要想知道在描述什么，还要往前找。前面一句话说雄鹿摩擦嗅觉传递的信息在社交中与其他鹿的种族的听觉信号起到了同样的作用。但是这种作用又是什么呢？继续往前找。可以看到说 well-marked rub is indicative of older, higher-status male，信息完整之后很容易得到 A 的答案。
8. 选 **D**。虽然原文有提到 D 中间的词 vicinity 但是和原文不符的是，原文说的是 general vicinity，而不是具体的 number。这个题基本上跟随着 first, second, third 就可以找答案，因为本段的主题就是在描述这个 buck rub 的作用。
9. 选 **D**。induce 引导、引发，选 stimulate。
10. 选 **C**。根据 chemical 定位，这句后面说物理上引导并使受精同步……因此 C 符合。A 原文第二句提到了，但原文说的是要 less than 2 days，和选项相反。B 原文说的是 fresh buck rubs 更受欢迎。D 这段提到的 rub being detected 都是关于 females。
11. 选 **C**。termed 被称为……术语，答案是 C。
12. 选 **A**。A 正确，因为根据前文知道 rub 只是由 male 造成的，而 scrapes 是雌雄都可以的。B 和原文不符，对应这段中间的地方，说到了 both visual and olfactory signal。C 这个也没有明显区分，scrapes 和 buck rubs 都是在秋天做的，before or during the rut。D 这个没提到。
13. 选 **B**。目前暂无解析。
14. 选 **BCF**。A 对应原文第二段两个 scientists 的观点，但两者并没有这样的逻辑关系，因此不选；B 正确，对应原文第四段，说 rubs 可以帮助 identify；C 正确，对应原文最后一段；D 文章中已经对 height, types of tree, direction 有了明确的描写，information 的区别是由气味传递的，因此选项不对；E 文章并没有提到相关的内容；F 正确，对应原文第五段里面出现的 help physiologically induce and synchronize fertility in females。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。

## 自我评价

用时： 分 秒

难度：易 / 中 / 难

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## Characteristics of Roman Pottery

The pottery of ancient Romans is remarkable in several ways. The high quality of Roman pottery is very easy to appreciate when handling actual pieces of tableware or indeed kitchenware and amphorae (the large jars used throughout the Mediterranean for the transport and storage of liquids, such as wine and oil). However, it is impossible to do justice to Roman wares on the page, even when words can be backed up by photographs and drawing. Most Roman pottery is light and smooth to touch and very tough, although, like all pottery, it shatters if dropped on a hard surface. It is generally made with carefully selected and purified clay, worked to thin-walled and standardized shapes on a fast wheel and fired in a kiln (pottery oven) capable of ensuring a consistent finish. With handmade pottery, inevitably there are slight differences between individual vessels of the same design and occasional minor blemishes (flaws). But what strikes the eye and the touch most immediately and most powerfully with Roman pottery is its consistent high quality.

This is not just an aesthetic consideration but also a practical one. These vessels are solid (brittle, but not fragile), they are pleasant and easy to handle (being light and smooth), and, with their hard and sometimes glossy (smooth and shiny) surfaces, they hold liquids well and are easy to wash. Furthermore, their regular and standardized shapes would have made them simple to stack and store. When people today are shown a very ordinary Roman pot and, in particular, are allowed to handle it, they often comment on how modern it looks and feels, and they need to be convinced of its true age.

As impressive as the quality of Roman pottery is its sheer massive quantity. When considering quantities, we would ideally like to have some estimates for overall production from particular sites of pottery manufacture and for overall consumption at specific settlements. Unfortunately, it is in the nature of the archaeological evidence, which is almost invariably only a sample of what once existed, that such figures will always be elusive. However, no one who has ever worked in the field would question the abundance of Roman pottery, particularly in the Mediterranean region. This abundance is notable in Roman settlements (especially urban sites) where the labor that archaeologists have to put into the washing and sorting of potsherds (fragments of pottery) constitutes a high proportion of the total work during the initial phases of excavation.

■ Only rarely can we derive any “real” quantities from deposits of broken pots. ■ However, there is one exceptional dump, which does represent a very large part of the site’s total history of consumption and for which an estimate of quantity has been produced. ■ On the left bank of the Tiber River in Rome, by one of the river ports of the ancient city, is a substantial hill some 50 meters high called Monte Testaccio. ■ It is made up entirely of broken oil amphorae, mainly of the second and third centuries A.D. It has been estimated that Monte Testaccio contains the remains of some 53 million amphorae, in which around 6,000 million liters of oil were imported into the city from overseas, imports into imperial Rome were supported by the full might of the state and were therefore quite exceptional—but the size of the operations at Monte Testaccio, and the productivity and complexity that lay behind them, nonetheless cannot fail to impress. This was a society with similarities to modern one—moving goods on a gigantic scale, manufacturing high-quality containers to do so, and occasionally, as here, even discarding them on delivery.

Roman pottery was transported not only in large quantities but also over substantial distances. Many Roman pots, in particular amphorae and the fine wares designed for use at tables, could travel hundreds of miles—all over the Mediterranean and also further afield. But maps that show the various spots where Roman pottery of a particular type has been found tell only part of the story. What is more significant than any geographical spread is the access that different levels of society had to good-quality products. In all but the remotest regions of the empire, Roman pottery of a high standard is common at the sites of humble villages and isolated farmsteads.

1. **Paragraph 1 indicates which of the following about Roman pottery?**
  - (A) Roman amphorae were of much higher quality overall than other Roman pottery.
  - (B) Roman pottery can best be appreciated when actual pieces are handled.
  - (C) Roman pottery declined slightly in quality when the use of fast wheels and kilns was introduced.
  - (D) Roman practical tableware spread more rapidly across the Mediterranean than amphorae did.
2. **All of the following are mentioned in paragraph 1 as characteristics of Roman pottery EXCEPT**
  - (A) It was usually made with high-quality clay.
  - (B) It generally did not weigh much.
  - (C) It did not break as easily as other ancient pottery.
  - (D) It sometimes had imperfections.
3. **According to paragraph 2, which of the following is NOT true of Roman vessels?**
  - (A) They were good containers for liquids.
  - (B) Their shapes allowed for easy stacking and storing.
  - (C) They sometimes had shiny surfaces.
  - (D) Their true age is immediately apparent.
4. **The author mentions the work of archaeologists in paragraph 3 in order to**
  - (A) support the idea that pottery was produced in large quantities by the Romans
  - (B) illustrate how hard it is for archaeologists to find complete pieces of Roman pottery
  - (C) contrast archaeological sites in Roman urban areas with other sites in the Mediterranean
  - (D) explain why the quantities of pottery found vary significantly from one site to another
5. **The word “substantial” in the passage is closest in meaning to**
  - (A) protected
  - (B) man-made
  - (C) large
  - (D) famous
6. **According to paragraph 4, Monte Testaccio is particularly important for archaeologists because archaeologists were able to**
  - (A) conclude how amphorae manufacturing increased rapidly after the second century A.D.
  - (B) find the locations where most of the amphorae in the Roman Empire were produced
  - (C) obtain relatively accurate calculations of the quantities of amphorae used over time in that place
  - (D) discover that the Roman state had supported amphorae production
7. **The word “entirely” in the passage is closest in meaning to**
  - (A) apparently
  - (B) completely
  - (C) basically
  - (D) mostly
8. **Paragraph 4 indicates which of the following about the port on the Tiber River near Monte Testaccio?**
  - (A) It was built around the third century A.D.
  - (B) It was close to areas where large quantities of oil were produced.
  - (C) It was in use only for a very short period of time.
  - (D) It had impressive level of commercial activity.
9. **The statement in paragraph 4 that amphorae delivered to the port near Monte Testaccio were occasionally discarded support which of the following?**
  - (A) Traders at the port were often careless.
  - (B) The quality of the amphorae used at the port was not very good.
  - (C) The scale of the trade made it possible to waste quality amphorae sometimes.
  - (D) The importing of oil from overseas gradually declined, reducing the need for pottery containers.
10. **The statement that “maps that show the various spots where Roman pottery of a particular type has been found tell only part of the story” makes the point that**
  - (A) maps indicate where specific pottery styles have been found, but they do not indicate where these styles originated

- (B) maps show the geographical spread of Roman pottery but not the people who had access to it
- (C) maps do not usually include pottery styles found in the remotest regions the Roman Empire
- (D) archaeologist studying Roman pottery need to use a range of techniques in their investigations

**11. The word “humble” in the passage is closest in meaning to**

- (A) rural
- (B) distant
- (C) ancient
- (D) modest

**12. The word “particular” in the passage is closest in meaning to**

- (A) specific
- (B) common
- (C) ancient
- (D) superior

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

That is because residents of a city did not usually discard used pottery at the same site over a long period of time.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The pottery of the ancient Roman Empire is remarkable.

**Answer choices**

- (A) Roman pottery is considered to be practical and of consistently high quality.
- (B) Roman pottery was transported over long distances, and different levels of society had access to quality pottery.
- (C) Archaeologists looking for the remains of Roman pottery concentrate on urban sites because that is where the oldest pieces of kitchenware and amphorae have been found.
- (D) Even though the exact quantity of pottery produced by the Romans is almost impossible to calculate, it is certain that it was produced in large quantities.
- (E) People are not familiar with the whole range of pottery of Romans created because most of the available pieces represent only a limited number of styles and shapes.
- (F) It is still unclear to archaeologists what the role of the Roman state in the commercial success of Roman pottery was.

### 参考答案与解析

1. 选 **B**。对应原文第二句。A 原文并没有对 amphorae 和 pottery 的比较。C 原文提到了快速转轮和烧窑的使用，但并没说因此陶器质量就下降了。D 提到了陶器在 Mediterranean 的广泛使用，但是没有种类间的比较。
2. 选 **C**。只有 C 和原文的描写冲突。
3. 选 **D**。D 选项对应的最后一句和原文矛盾，原文说一眼看上去这个 pot 是非常现代化的，但实际很古老了，因此 its true age 并不明显。
4. 选 **A**。本段的主题就是第一句，强调了 massive quantity，因此后面提到 work of archaeologists 也是为了支持这个主题。
5. 选 **C**。substantial 大量的、实质上的，答案应该选择 large。
6. 选 **C**。这里介绍 Monte Testaccio 是在支持本段的论点。回到原文这段的第一句可以看到原文说“很难通过 broken pot 来确定那个时期的 pot 产量，而 Monte Testaccio 的确是个例外”，即可以通过这个 dump 遗址得到当时的 quantities。
7. 选 **B**。entirely 完全地，答案是 completely。
8. 选 **D**。根据 Tiber River 定位，看到后面的描述说 around 6000 million liters of oil were imported into city from overseas，那么也就是说当时的进出口贸易非常繁华。
9. 选 **C**。根据 discarded 定位到原文最后一句，向前找到描述：如同现代工业社会一样，大量生产和需求，但是背后的生产力并不能满足之类的，所以在运送的时候也是如此，有时大量运送就难免会有打碎的，因此选择 C。A 原文没提到；B 原文也没说，而且前文一直在说 pot 都是 high quality 的。D 这里也没说到 oil 和 pottery 的关系。
10. 选 **B**。这里说 map 只是 tell part of the story，那么证明能得到 roman pottery 的不仅是 map 描绘的范围，应该会有更大的范围；从而来支持这一段的中心句，over substantial distances。A 选项错误，styles 是从罗马来的。CD 跟原文也没关系。而 B 符合，说 maps 在一定程度上说明了罗马陶器的地理散播，但并不是所有能得到陶器的人。
11. 选 **D**。humble 谦虚的、简陋的，选 modest。
12. 选 **A**。particular 特殊的，选 specific。
13. 选 **B**。要插入的句子中出现了 that is because，那么 that 肯定是指代了前文的某个现象，然后用要插入的这句话进行解释。第一句说，很少有遗址可以表明这种陶器的产量，第二句说但有个例外，那么应该是先解释原因、再说例外的情况。that 指代的就是第一句话描述的现象，因此插入第二个空。
14. 选 **ABD**。A 正确，对应文章第一段和第二段，第一段重点说 high quality，第二段说不仅是审美考虑也是 practical 的；B 正确，对于原文最后一段；C 对应原文第四段，但原文并没说要 concentrate on urban sites，也没说选项中提到的原因；D 正确，对应文章第四段，说很少有遗址可以体现其大量的生产，但是种种证据表明了其 large quantities；E 不选，原文没提到；F 不选，原文没提到。

### 笔记区

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**Competition**

When several individuals of the same species or of several different species depend on the same limited resource, a situation may arise that is referred to as competition. The existence of competition has been long known to naturalists; its effects were described by Darwin in considerable detail. Competition among individuals of the same species (interspecies competition), one of the major mechanisms of natural selection, is the concern of evolutionary biology. Competition among the individuals of different species (interspecies competition) is a major concern of ecology. It is one of the factors controlling the size of competing populations, and extreme cases it may lead to the extinction of one of the competing species. This was described by Darwin for indigenous New Zealand species of animals and plants, which died out when competing species from Europe were introduced.

No serious competition exists when the major needed resource is in superabundant supply, as in most cases of the coexistence of herbivores (plant eaters). Furthermore, most species do not depend entirely on a single resource, if the major resource for a species becomes scarce, the species can usually shift to alternative resources. If more than one species is competing for a scarce resource, the competing species usually switch to different alternative resources. Competition is usually most severe among close relatives with similar demands on the environment. But it may also occur among totally unrelated forms that compete for the same resource, such as seed-eating rodents and ants. The effects of such competition are graphically demonstrated when all the animals or all the plants in an ecosystem come into competition, as happened 2 million years ago at the end of Pliocene, when North and South America became joined by the Isthmus of Panama. North and South American species migrating across the Isthmus now came into competition with each other. The result was the extermination of a large fraction of the South American mammals, which were apparently unable to withstand the competition from invading North American species—although added predation was also an important factor.

To what extent competition determines the composition of a community and the density of particular species has been the source of considerable controversy. The problem is that competition ordinarily cannot be observed directly but must be inferred from the spread or increase of one species and the concurrent reduction or disappearance of another species. The Russian biologist G. F. Gause performed numerous two-species experiments in the laboratory, in which one of the species became extinct when only a single kind of resource was available. On the basis of these experiments and of field observations, the so-called law of competitive exclusion was formulated, according to which no two species can occupy the same niche.

**Numerous seeming exceptions to this law have since been found, but they can usually be explained as cases in which the two species, even though competing for a major joint resource, did not really occupy exactly the same niche.**

Competition among species is of considerable evolutionary importance. The physical structure of species competing for resources in the same ecological niche tends to gradually evolve in ways that allow them to occupy different niches. Competing species also tend to change their ranges so that their territories no longer overlap. The evolutionary effect of competition on species has been referred to as “species selection”; however, this description is potentially misleading. Only the individuals of a species are subject to the pressures of natural selection. The effect on the well-being and existence of a species is just the result of the effects of selection on all the individuals of the species. Thus species selection is actually a result of individual selection.

Competition may occur for any needed resource. ■ In the case of animals it is usually food; in the case of forest plants it may be light; in the case of substrate inhabitants it may be space, as in many shallow-water bottom-dwelling marine organisms. ■ Indeed, it may be for any of the factors, physical as well as biotic, that are essential for organisms. ■ Competition is usually the more severe the denser the population. ■ Together with predation, it is the most important density-dependent factor in regulating population growth.

1. The phrase “mechanisms of natural selection” in the passage is closest in meaning to
  - (A) types of natural selection
  - (B) dangers of natural selection
  - (C) problems natural selection solves
  - (D) ways natural selection works
2. According to paragraph 1, what is one effect of competition among individuals of different species?
  - (A) It results in the eventual elimination of the resource for which they are competing.
  - (B) It leads to competition among individuals of the same species.
  - (C) It encourages new species to immigrate to an area.
  - (D) It controls the number of individuals in the competing populations.
3. The word “indigenous” in the passage is closest in meaning to
  - (A) native
  - (B) rate
  - (C) most
  - (D) numerous
4. In paragraph 1, why does the author mention what happened in New Zealand?
  - (A) To indicate that Darwin understood the importance of competition
  - (B) To illustrate that competition can lead to the extinction of species
  - (C) To identify where the idea of competition among species first arose
  - (D) To argue against the idea that the process of selection is a natural occurrence
5. According to paragraph 2, competition is not usually a significant factor among two coexisting species when
  - (A) one of the species has only recently moved into the territory of the other
  - (B) the species are closely related to each other
  - (C) the population of one species is much larger than that of the other
  - (D) both of the species are herbivores
6. The word “graphically” in the passage is closest in meaning to
  - (A) vividly
  - (B) frequently
  - (C) broadly
  - (D) typically
7. In paragraph 2, why does the author talk about what happened as a result of North and South America becoming joined at the Isthmus of Panama?
  - (A) To make the point that predation can have as much effect on species survival as competition does
  - (B) To show how the ability to switch to an alternative resource can give a species a competitive advantage
  - (C) To account for the current species composition of North and South America
  - (D) To provide an example of the serious effects of competition between unrelated species
8. Paragraph 3 supports the idea that Gause’s experiments were important because they
  - (A) provided a situation in which competition could be removed from the interaction between two species
  - (B) showed that previous ideas about the extent to which competition determines the composition of a community were completely mistaken
  - (C) helped establish that competition will remove all but one species from any given ecological niche
  - (D) offered evidence that competition between species is minimal when there is an overabundance of a single food source
9. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Apparent exceptions to this law usually involves cases in which two species compete for the same major resource but occupy slightly different niches.
  - (B) Although it may appear that two species always have different niches, many exceptions show that species compete with each other.

- (C) Cases in which two species not only compete for a shared resource but also occupy similar niches are considered exceptions to this law.
- (D) Cases in which the two species do not occupy that same niche yet still compete for the same resource are believed to be exceptions to this law.

**10. According to paragraph 4, how does competition affect evolution?**

- (A) It results in the evolution of physical structures that allow the species to compete with each other more effectively.
- (B) It results in the evolutionary extinction of all but one of the competing species.
- (C) It results in the competing species evolving in such a way that they no longer compete for the same resources.
- (D) It results in the competing species evolving to become so much like each other that competition between them eventually disappears.

**11. According to paragraph 4, “species selection” is a misleading term because it**

- (A) overemphasizes the role of selection pressure in species extinction
- (B) suggests that selection pressures directly influence whole species
- (C) does not make a distinction between species extinction and species evolution
- (D) suggests that extinction always results whenever there is a competition

**12. The word “regulating” in the passage is closest in meaning to**

- (A) controlling
- (B) explaining
- (C) observing
- (D) stopping

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

That is, as the density of a population increases, competition has a greater impact and leads to greater mortality.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

When necessary resources are limited, competition can occur among individuals of the same species or of different species.

**Answer choices**

- (A) Competition can eliminate a species, but since most species do not depend on a single resource, competition is often reduced by switching to alternative resources.
- (B) Investigation of the ecological role of competition is difficult because ordinarily the competition cannot be observed directly and must be inferred from its presumed effects.
- (C) Competition between a pair of species tends to lessen over time because the species tend to evolve to occupy different ecological niches and ranges.
- (D) Competition between individual of the same species is usually for food whereas competition between species is usually for habitat.
- (E) Experiments and field observation have established that competition between species is strong enough to prevent two species from occupying the same ecological niche.
- (F) Competition is usually strongest when the density of the competing populations is the same.

### 参考答案与解析

1. 选 **D**。mechanism 机制、原理，从原文也可以推断出来。我们都知道进化是由于“物竞天择”，原文这一句就是这个意思。因此这道题选 D。
2. 选 **D**。通过 competition among individuals of different species 定位，但这句并没提到任何一个选项，继续往后看，下一句的主语是代词 it，指代了 interspecies competition，因此后面也是对物种间竞争的描述，而这一句提到了是控制 population 的因素，对应了选项 D。
3. 选 **A**。indigenous 土生土长的，选 native。
4. 选 **B**。这一段提到种族间竞争时的论点是可以控制不同种族的数量，然后举出了新西兰动植物作为例子，而例子都是用来证明和支持观点的，因此选择 B 选项。
5. 选 **D**。根据 coexisting species 定位，前文就是原因，因为资源供给充足，而 coexistence of herbivores 是例证，coexistence herbivores 间没有激烈竞争是因为它们都吃草，而草资源是非常充足的。理想答案是当资源充足时，竞争不会成为重要的影响因素，但原文没有，唯一合适的选择就是 D，也就是原文提到的例证。
6. 选 **A**。graphically 如画一般地，选 vivid。
7. 选 **D**。引出南北美洲物种竞争结果的主句是 The effects of such competition are graphically demonstrated，由此推断南北美洲动物竞争的结果就是为了说明竞争的 effects，因此选择 D。A 原文提到了，在最后的半句，但是前面的 although 说明了这不是主要观点。
8. 选 **C**。通过 Gause's experiments 定位，文章在描述完实验内容后，说 on the basis of these experiment，那么说明后面就是实验得到的结论，也就是 law of competitive exclusion，因此选择 C。
9. 选 **A**。原文中句子的主干是 seeming exceptions have been found，然后在转折之后说这种例外是可以被解释的，因此只有 A 符合。BCD 都在一定程度上改变了原句的意思。
10. 选 **C**。第一句就提到了问题所问的内容，说 competition 具有 evolutionary importance，后面应该就是具体的解释。往后看说同一小生态环境中的竞争物种 tend to，那么 tend to 的内容就是答案，对应就是 C，使得其领地不再重叠，也就是不再同一区域内进行资源竞争了。
11. 选 **B**。通过 species selection 定位，后面出现了转折，说这个描写是 misleading 的，往后肯定会解释原因。原文说 natural selection 其实是直接作用在 individual 上的，而不是 species 上，所以错误，对应 B 选项。
12. 选 **A**。regulate 管制，答案是 controlling。
13. 选 **D**。要插入的句子开头的 that 一定是指代前文的一句话，并且跟 density 有关，而原文第一次出现 density 有关的词是在 D 选项前的一句话 denser，插入后发现，插入的就是在进一步说明 D 前的那一句；而后文又补充了 predation 和 competition 对 density 的共同作用，逻辑关系吻合，意思通顺。
14. 选 **ACE**。A 正确，对应原文第二段第二、三句；B 后半句在原文中提到了，但是并没有与前半句这样的因果关系，不选；C 正确，对应原文第四段第二句；D 原文并没有这样的意思，一直在说是在竞争 resource，不选；E 正确，对应原文第三段 on the basis of 那一句。

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**The History of Waterpower**

Moving water was one of the earliest energy sources to be **harnessed** to reduce the workload of people and animals. No one knows exactly when the waterwheel was invented, but irrigation systems existed at least 5,000 years ago, and it seems probable that the earliest waterpower device was the *noria*, a waterwheel that raised water for irrigation in attached jars. The device appears to have evolved no later than the fifth century B.C., perhaps independently in different regions of the Middle and Far East.

The earliest waterpower mills were probably vertical-axis mills for grinding corn, known as Norse or Greek mills, which seem to have appeared during the first or second century B.C. in the Middle East and a few centuries later in Scandinavia. In the following centuries, increasingly sophisticated waterpower mills were built throughout the Roman Empire and beyond its boundaries in the Middle East and northern Europe. In England, the Saxons are thought to have used both horizontal and vertical-axis wheels. The first documented English mill was in the eighth century, but three centuries later about 5,000 were recorded, suggesting that every settlement of any size had its mill.

Raising water and grinding corn were by no means the only uses of the waterpower mill, and during the following centuries, **the applications of waterpower** kept pace with the developing technologies of mining, iron working, paper making, and the wool and cotton industries. Water was the main source of mechanical power, and by the end of the seventeenth century, England alone is thought to have had some 20,000 working mill. There was much debate on the relative efficiencies of different types of waterwheels. ■ The period from about 1650 until 1800 saw some excellent scientific and technical investigations of different designs. ■ They revealed output powers ranging from about 1 horsepower to perhaps 60 for the largest wheels and confirmed that for maximum efficiency, the water should pass across the blades as smoothly as possible and fall away with minimum speed, having given up almost all of its kinetic energy. ■ (They also proved that, in principle, the overshot wheel, a type of wheel in which an overhead stream of water powers the wheel, should win the efficiency competition.) ■

But then steam power entered the scene, putting the whole future of waterpower in doubt. An energy analyst writing in the year 1800 would have painted a very **pessimistic** picture of the future for waterpower. The coal-fired steam engine was taking over, and the waterwheel was fast becoming obsolete. However, like many later experts, this one would have suffered from an inability to see into the future. A century later the picture was completely different: **by then**, the world had an electric industry, and a quarter of its generating capacity was water powered.

**The growth of the electric-power industry was the result of a remarkable series of scientific discoveries and development in electro technology during the nineteenth century, but significant changes in what we might now call hydro (water) technology also played their part.** In 1832, the year of Michael Faraday's discovery that a changing magnetic field produces an electric field, a young French engineer patented a new and more efficient waterwheel. His name was Nenoit Fourneyron, and his device was the first successful water turbine. (The word turbine comes from the Latin *turbo*: something that spins). The waterwheel, **unaltered** for nearly 2,000 years, had finally been superseded.

Half a century of development was needed before Faraday's discoveries in electricity were translated into full-scale power stations. In 1881 the Godalming power station in Surrey, England, on the banks of the Wey River, created the world's first public electricity supply. The power source of this most modern technology was a traditional waterwheel. Unfortunately this early plant experienced the problem common to many forms of renewable energy: the flow in the Wey River was unreliable, and the waterwheel was soon replaced by a steam engine.

From this primitive start, the electric industry grew during the final 20 years of the nineteenth century at a rate seldom if ever exceeded by any technology. The capacity of individual power stations, many of them hydro plants, rose from a few kilowatts to over a megawatt in less than a decade.

1. The word **“harnessed”** in the passage is closest in meaning to
  - (A) known
  - (B) depended on
  - (C) recognized
  - (D) utilized
2. In paragraph 1, uncertainty is expressed about all of the following aspects of the early development of waterpower EXCEPT
  - (A) when exactly the very first waterpower devices were invented
  - (B) when exactly the very first waterpower devices were developed
  - (C) whether water was one of the earliest sources of power to be used by humans
  - (D) whether the very earliest waterpower devices arose independently
3. According to paragraph 2, what was true of the waterpower mills built throughout the Roman Empire?
  - (A) Most had horizontal-axis wheels
  - (B) Their design was based on mills that had long been used in Scandinavia
  - (C) Their design was more popular beyond the Empire’s boundaries than it was within the Empire
  - (D) They are more advanced than the mills used in the Middle East at an earlier time
4. The phrase **“the applications of waterpower”** in the passage is closest in meaning to
  - (A) the uses to which waterpower was put
  - (B) the improvement made to waterpower
  - (C) the method by which waterpower was supplied
  - (D) the source of waterpower available
5. According to paragraph 4, which of the following was discovered as a result of scientific and technical investigations of waterpower conducted between 1650 and 1800?
  - (A) Some types of small waterwheel can produce as much horsepower as the very largest wheels.
  - (B) Waterwheels operate more efficiently when water falls away from their blades slowly than when water falls away quickly.
  - (C) Waterwheel efficiency can be improved by increasing the amount of kinetic energy water contains as it passes over a waterwheel’s blades.
  - (D) Unlike other types of waterwheels, the overshot wheel is capable of producing more than 60 horsepower units of energy.
6. The word **“pessimistic”** in the passage is closest in meaning to
  - (A) negative
  - (B) unlikely
  - (C) surprising
  - (D) incomplete
7. The term **“by then”** in the passage refers to
  - (A) by the time steam power entered the scene
  - (B) by the year 1800
  - (C) by the year 1900
  - (D) by the time waterwheel was becoming obsolete
8. According to paragraph 5, why did waterpower become more importantly by 1900?
  - (A) Better waterwheel designs improved the efficiency of waterpower.
  - (B) Waterpower was needed to operate steam engines.
  - (C) Waterpower was used to generate electricity.
  - (D) Waterwheels became more efficient than coal-powered engines.
9. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The growth of the electric-power industry stimulated significant changes in hydro technology and scientific progress in electro technology in the nineteenth century.

- (B) The changes in hydro technology that led to the growth of the electric-power industry also led to discoveries and developments in electro technology in the nineteenth century.
- (C) Advances in electro technology in the nineteenth century and changes in hydro technology were responsible for the growth of the electric-power industry.
- (D) In the nineteenth century, the scientific study of electro technology and hydro technology benefited greatly from the growth of the electric-power industry.

**10. The word “unaltered” in the passage is closest in meaning to**

- (A) unimproved
- (B) unequaled
- (C) unchanged
- (D) unsatisfactory

**11. The discussion of the history of electric power production in paragraph 6 supports which of the following?**

- (A) 1832 marked the beginning of the industrial production of electric power.
- (B) Turbines using Benoit Fourneyron’s design were eventually used to generate electric power.
- (C) Benoit Fourneyron quickly applied Michael Faraday’s discovery about electric fields to acquire a pattern for a new and more efficient waterwheel.
- (D) Practical advances in hydro technology were more important to the development of electric power than were advances in the theoretical understanding of electricity.

**12. According to paragraph 7, what problem did the early power station in the town of Godalming in Surrey, United Kingdom, face in providing electricity?**

- (A) The traditional waterwheel is used was not large enough to meet the demand for energy.
- (B) The flow of the River Wey, on which the power station depended, was unreliable.
- (C) The operators of the Godalming power station had little experience with hydro technology.
- (D) The steam engine that turned the waterwheel was faulty and needed to be replaced.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Happily, serious studies began to be conducted to help resolve disagreements.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Ever since the development of waterwheel, which occurred no later than 500 B.C., people have used moving water as a source of power.

**Answer choices**

- (A) The first water-powered machines were probably used to grind corn, and as technology advanced, waterwheels were used as the main source of power in many industries.
- (B) In the late nineteenth century an electric power station in England began using water power from a nearby river, creating a dependable source of power that quickly replaced the steam engine.
- (C) In the seventeenth and eighteenth centuries, design improvements in waterwheels led to discoveries of how to increase their efficiency and power output.
- (D) Almost every large town in England had a waterpower mill, allowing England to become the world’s leader in industries that depended on water for their power.
- (E) Waterpower mills were probably invented about the same time in the Middle East and Scandinavia and then spread to England by about the second century B.C.
- (F) After declining in importance in the early 1800’s, waterpower came back into demand by the end of the century as a means to power electric plants and water turbines.

### 参考答案与解析

1. 选 **D**。harness 驾驭，选择 utilized。
2. 选 **C**。A 对应原文第二句，正确，不选；B 虽然没有直接在原文中提到，但是也可以有这层意思，可以作为待定选项，但看到 C 之后就可以排除 B 了，因为 C 和原文第一句有直接冲突，因此选择 C；D 对应这段的最后一句。
3. 选 **D**。由 throughout the roman empire 定位，对于 waterpower mill 的修饰是 increasingly sophisticated，即更复杂、更先进，因此选择 D。
4. 选 **A**。这里的 application 指的是水力资源的应用，也就是作用，因此选择 A，水利的用处。
5. 选 **B**。通过 scientific and technical investigation 定位，后面几句就是调查的结果了，原文说输出功率从 1-60 马力不等，水流越 smooth，下落越慢，效率越高。A 选项原文没提到；B 选项正确；C 选项 water contain 的动能并不能改变，而是要尽可能使其含有的动能释放出来；D 提到了 overshot wheel，对应本段最后一句，但是原文并没说这种轮就能输出高于 60 匹的能量。
6. 选 **A**。pessimistic 悲观的，选择 negative。
7. 选 **C**。因为前文提到在 1800 年，水力资源利用衰败，by then 的前半句说 a century later，因此应该是一百年以后，也就是 1900 年。
8. 选 **C**。这段第一句就指出了电力发展，然后又说水利能源的重大改变促进了电力发展，因此符合 C 选项。
9. 选 **C**。原文句子的逻辑是 electrotechnology 和 changes in water growth 共同促进了 electric power 工业，A 逻辑关系完全反了，B 很混乱，D 与 A 逻辑相似，因此选择 C。
10. 选 **C**。unaltered 一成不变的，选 unchanged。注意 A 是一个迷惑选项，但是 unaltered 并没有进步、改良的意思，因此 C 更合适。
11. 选 **B**。上一段说 Benoit 将 Faraday 的发现通过发明 turbine 得以应用，通过 turbine 就可以实现发电了。
12. 选 **B**。通过 Godalming 定位，往后阅读出现了 unfortunately 转折，也就是要说遇到的问题了，“:” 后面就是答案了，所以选 B。
13. 选 **A**。要插入的句子要 resolve disagreement，而这段的第一句就说很多 debate，那么插到第一个空里正合适。
14. 选 **AEF**。A 正确，对应原文第二段第一句；B 错误，原文说的是 river 的水流不稳定，结果很快被 steam engine 取代了，对应原文倒数第二段最后两句；C 正确，对应原文第四段；D 错误，原文说英国的居住点不管大小，都有自己的 mill，对应原文第二段最后一句；E 错误，对应原文第一段，原文说没人知道 water mill 是什么时候发明的，而且后半句时间也不对；F 正确：对应原文第五段最后一句和第六段。

### 笔记区

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## 自我评价

用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Role of Play in Development

Play is easier to define with examples than with concepts. In any case, in animals it consists of leaping, running, climbing, throwing, wrestling, and other movements, either along, with objects, or with other animals. Depending on the species, play may be primarily for social interaction, exercise, or exploration. One of the problems in providing a clear definition of play is that it involves the same behaviors that take place in other circumstance—dominance, predation, competition, and real fighting. Thus, whether play occurs or not depends on the intention of the animals, and the intentions are not always clear from behaviors alone.

Play appears to be a developmental characteristic of animals with fairly sophisticated nervous systems, mainly birds and mammals. Play has been studied most extensively in primates and canids (dogs). Exactly why animals play is still a matter debated in the research literature, and the reasons may not be the same for every species that plays. Determining the functions of play is difficult because the functions may be long-term, with beneficial effects not showing up until the animal's adulthood.

Play is not without considerable costs to the individual animal. Play is usually very active, involving movement in space and, at times, noisemaking. Therefore, it results in the loss of fuel or energy that might better be used for growth or for building up fat stores in a young animal. Another potential cost of this activity is greater exposure to predators since play is attention-getting behavior. Great activities also increase the risk of injury in slipping or falling.

The benefits of play must outweigh costs, or play would not have evolved, according to Darwin's theory. Some of the potential benefits relate directly to the healthy development of the brain and nervous system. In one research study, two groups of young rats were raised under different conditions. One group developed in an "enriched" environment, which allowed the rats to interact with other rats, play with toys, and receive maze training. The other group lived in an "impoverished" environment in individual cages in a dimly lit room with little stimulation. At the end of the experiments, the results showed that the actual weight of the brains of the impoverished rats was less than that of those raised in the enriched environment (though they were fed the same diets). Other studies have shown that greater stimulation not only affects the size of the brain but also increase the number of connections between the nerve cells. Thus, active play may provide necessary stimulation to the growth of synaptic connections in the brain, especially the cerebellum, which is responsible for motor functioning and movements.

Play also stimulates the development of the muscle tissues themselves and may provide the opportunities to practice those movements needed for survival. Prey species, like young deer or goats, for example, typically play by performing sudden flight movements and turns, whereas predator species, such as cats, practice stalking, pouncing, and biting.

Play allows a young animal to explore its environment and practice skill in comparative safety since the surrounding adults generally do not expect the young to deal with threats or predators. Play can also provide practice in social behaviors needed for courtship and mating. **Learning appropriate social behaviors is especially important for species that live in groups, like young monkeys that needed to learn to control selfishness and aggression and to understand the give-and-take involved in social groups.** They need to learn how to be dominant and submissive because each monkey might have to play either role in the future. Most of these things are learned in the long developmental periods that primates have, during which they engage in countless play experiences with their peers.

There is a danger, of course, that play may be misinterpreted or not recognized as play by others, potentially leading to aggression. ■ This is especially true when play consists of practicing normal aggressive or predator behaviors. ■ Thus, many species have evolved clear signals to delineate playfulness. ■ Dogs, for example, will wag their tails, get down their front legs, and stick their behinds in the air to indicate "what follows is just for play." ■

1. **According to paragraph 1, why is play difficult to define?**
  - (A) Play must be defined with concepts, not examples.
  - (B) Play behavior often looks like nonplay behavior
  - (C) Play often occurs in the presence of animals that are not playing
  - (D) Play occurs independently of an animal's intentions
2. **According to paragraph 2, which of the following presents a particular challenge to researchers who study play behavior in animals**
  - (A) The delay between activities and the benefits the animal derives from them.
  - (B) The difficulty in determining which animal species play and which do not.
  - (C) The fact that for most animals, there is no clear transition from youth to full adulthood.
  - (D) The lack of research on the play behavior of animals other than canids and primates.
3. **The word "considerable" in the passage is closest in the meaning to**
  - (A) initial
  - (B) practical
  - (C) eventually
  - (D) significant
4. **According to paragraph 3, each of the following is a cost to animals that engage in play EXCEPT**
  - (A) exposure to predators
  - (B) a buildup of fat stores
  - (C) a loss of fuel that could be used for growth
  - (D) risk of injury from slipping or falling
5. **Why does the author include the comment "though they were fed the same diets"?**
  - (A) To show why rats living in impoverished environments need less food than those living in enriched environments
  - (B) To eliminate the possibility that differences in diet were responsibly for observed differences in brain weight
  - (C) To emphasize the point that rats were fed only the amount of food needed to keep them alive
  - (D) To suggest that rats fed the same diet have smaller brains than those fed a varied food
6. **Paragraph 4 supports which of the following statements about an animal's brain?**
  - (A) The heavier the brain, the richer the environment in which the animal was raised.
  - (B) The younger the animal, the harder it is to develop new connections between nerve cells.
  - (C) The larger the animal, the harder it is to develop new connections between nerve cells.
  - (D) The larger the animal's cerebellum, the larger will be the animal's nerve cells.
7. **According to paragraph 5, why might play behavior of prey species be different from those of predator species?**
  - (A) Unlike predator species, prey species use play to prevent inappropriate social behaviors, such as biting.
  - (B) Some prey species are physically incapable of certain types of predator movements.
  - (C) The survival of each species type is linked to particular sets of muscular movements.
  - (D) Predator species have more opportunities to practice play behaviors than prey species.
8. **The word "comparative" in the passage is closest in meaning to**
  - (A) relative
  - (B) temporary
  - (C) sufficient
  - (D) complete
9. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Only monkeys that have learned to control their selfish and aggressive behaviors can be involved in social groups.
  - (B) Selfish and aggressive animals like monkeys live in groups in order to practice appropriate social behaviors.

- (C) Monkeys and other social animals need to learn behaviors appropriate for their social groups.
- (D) Some monkeys are naturally too selfish and aggressive to understand the give-and-take of social groups, so they learn such important behaviors while young.

**10. What can be inferred from paragraph 6 about the role of adults in play activities of the young?**

- (A) Adults help their young learn to become dominant within the social group.
- (B) Young animals learn how to play from the adults within their social group.
- (C) Adults allow the young to engage in play behaviors within a protected, safe environment.
- (D) The long developmental period of some animals allows adults more time to teach their young how to deal with the threats of predators.

**11. The word “potentially” in the passage is closest in meaning to**

- (A) undoubtedly
- (B) possibly
- (C) unfortunately
- (D) quickly

**12. According to paragraph 7, how do some animals ensure that other animals understand that they are just playing?**

- (A) By playing only with animals who are not predator
- (B) By avoiding any aspects of the play behavior that are dangerous
- (C) By practicing nonaggressive and non-predatory behaviors
- (D) By using a set of signals that occurs only in play

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

With messages such as those, even dogs that are strangers to each other can be playing within a few minutes.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Play appears to be a developmental characteristic of animals with fairly sophisticated nervous systems, mainly birds and mammals.

**Answer choices**

- (A) Although play often resembles aggression, flight, or other purposeful activities, researchers do not agree on the reasons for and functions of play.
- (B) Although many animals develop physically from play, too many young animals become victims of their natural predators while playing.
- (C) Animals such as rats, dogs, deer, goats and monkeys learn how to be both dominant and submissive during play activities so that they will fit in better with their adult social groups.
- (D) The function of play is still debated in the research literature primarily because each animal species uses so few of the many available types of play behavior.
- (E) Energy expenditure and security risks are some of the costs to animals of play behavior, but the costs are not so great that they outweigh the long-term benefits of play to the species.
- (F) As experiments and observations have shown, animals that play at some stages of their development obtain neurological, muscular, or social benefits from the play behaviors.

**笔记区**

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## 参考答案与解析

1. 选 **B**。第一段说明了同样的 behavior 会同时发生在 play 和其他一些非 play 的情况中，所以 B 正确。A 与原文第一句矛盾，C 选项没有提到，D 选项与原文第一段最后一句矛盾。
2. 选 **A**。看第二段的最后两句。倒数第二句说动物玩耍的原因仍然在被 debating，后面说确定玩耍的作用 (function) 非常难，那也就对应了原题的 challenge。because 后面出现了原因，说这些 function 是长期的，其 beneficial 要到动物成年才出现，所以跟 A 选项吻合。BCD 没有提到。
3. 选 **D**。considerable: 重要的，值得考虑的。选项 A 是最初的，B 是实用的，C 是最终的，D 是重大的，有意义的。
4. 选 **B**。从 Therefore 开始后面的都是 potential cost。B 选项看似提到了，但是原文是说失去了 fat store 的机会，而不是因为 play 而 build up 了。所以 B 错。
5. 选 **B**。这里提到试验结果。前面从 in one research of study 开始描述这个试验，提到了两个对比组 under different conditions。后面是在说结果，括号里面的内容是对结论的解释说明。ACD 三个选项一点儿都不沾边，只要高中学过一点数理化就知道这个是控制变量的试验，所以答案选 B。
6. 选 **A**。原文中从 other studies 开始有描述了另外的观点。说 greater stimulation 不仅会影响大脑的大小，也会增加神经细胞间的连接的数量，而这个 stimulation 是由 active play 提供的。根据上文，环境越复杂，active play 越多，因此 stimulation 越多，导致动物的大脑更大，也就更重。所以 A 选项符合这个观点。BCD 都没提到。
7. 选 **C**。这道题的关键词在 needed for survival。因为 prey species 和 predator species 对于 survival 的要求不同，所以导致他们 play behavior 也不同，所以选 C。ABD 原文都没提。
8. 选 **A**。comparative 是相对的，相当的。A 是相对的；B 是暂时的；C 是充足的；D 是完成的。
9. 选 **C**。这道题中的原句主干是 learning social behavior is important，特别是对于群居的动物。然后用了 monkey 做例证。A 只提到了 monkeys 要控制自己才能融入群体，但没提到主干部分。B 说自私和攻击性强的动物要学 social behavior，这就把其他动物排除在外了，改变了原句的意思。D 是错误选项，原文并没说猴子太自私以至于不能理解 give and take，与原文矛盾。
10. 选 **C**。根据 young & adult 定位第六段第一句。说成年动物要让年轻的动物在相对安全的环境下玩儿。因此可以得到答案 C 正确。A 原文没有说让 young 去学怎么 dominant，B 原文虽然提到 social group 但没提到是从 adults 身上学习。D 原文完全没有相关描写。
11. 选 **B**。potentially 潜在地。A 毫无疑问地；B 可能地；C 不幸地；D 快速地。
12. 选 **D**。这一段前半部分一直在描述说有动物之间会误以为是真的 aggression，中间出现了 thus 证明后面会说解决的方法。这里说解决方法是用 clear signals 去表达 playfulness，所以答案是 D。
13. 选 **D**。要插入的句子开头为 With message such as those，那么说明前面肯定会描述一些 messages，后面又说 even dogs，那证明前面应该也提到了狗的行为。所以这里应该插在最后一个空里。
14. 选 **AEF**。A 对应在原文第一段，提到 play 的行为包括了 running, climbing, fighting 等 aggression 的行为，但是很难确定其 function 所以 A 正确；B 原文没有提到，虽然第三段提到了 potential cost，后面也说 adults 通常会让 young 在相对安全的情况下 play，但并没有说太多太多的小动物变成了 victims，不选；C 原文虽然说他们要学 social behavior，但没提到说这类动物要学着去 dominant，不选；D 对应原文第一段，但选项中的原因和原文不符，不选；E 对应原文第三段，potential cost 提到了 loss of energy, security risks 等等，但是第一段也提到说 play 是 long-term beneficial 的，第四段开头说好处一定会 outweigh 其 costs，正确，选；F 选项对应原文第四、五段，第四段说 play 会影响大脑发育，神经细胞间连接的数量，第五段说到了有益于 muscle tissue 的发育，后文第六段也提到了 social benefit，正确，选。

**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**The Pace of Evolutionary Change**

A heated debate has enlivened recent studies of evolution. Darwin's original thesis, and the viewpoint supported by evolutionary gradualists, is that species change continuously but slowly and in small increments. Such changes are all but invisible over the short time scale of modern observations, and, it is argued, they are usually obscured by **innumerable** gaps in the imperfect fossil record. Gradualism, with its stress on the slow pace of change, is a comforting position, repeated over and over again in generations of textbooks. By the early twentieth century, the question about the rate of evolution had been answered in favor of gradualism to most biologists' satisfaction.

Sometimes a closed question must be reopened as new evidence or new arguments based on old evidence come to light. **In 1972 paleontologist Stephen Jay Gould and Niles Eldredge challenged conventional wisdom with an opposing viewpoint, the punctuated equilibrium hypothesis, which posits that species give rise to new species in relatively sudden bursts, without a lengthy transition period.** These episodes of rapid evolution are separated by relatively long static spans during which a species may hardly change at all.

The punctuated equilibrium hypothesis attempts to explain a curious feature of the fossil record—one that has been familiar to paleontologist for more than a century but has usually been ignored. Many species appear to remain unchanged in the fossil record for millions of years—a situation that seems to be at odds with Darwin's model of continuous change. Intermediated fossil forms, predicted by gradualism, are typically lacking. In most localities a given species of clam or coral persists essentially unchanged throughout a thick formation of rock, only to be replaced suddenly by a new and different species.

The evolution of North American horse, which was once presented as a classic textbook example of gradual evolution, is now providing equally **compelling** evidence for punctuated equilibrium. A convincing 50-million-year sequence of modern horse ancestors—each slightly larger, with more complex teeth, a longer face, and a more prominent central toe—seemed to provide strong support for Darwin's contention that species evolve gradually. But close examination of those fossil deposits now reveals a somewhat different story. Horses evolved in discrete steps, each of which persisted almost unchanged for millions of years and was eventually replaced by a distinctive newer model. The four-toed Eohippus preceded the three-toed Miohippus, for example, but North American fossil evidence suggests a jerky, uneven transition between the two. If evolution had been a continuous, gradual process, one might expect that almost every fossil specimen would be slightly different from every year.

If it seems difficult to conceive how major changes could occur rapidly, consider this: an **alteration** of a single gene in flies is enough to turn a normal fly with a single pair of wings into one that has two pairs of wings.

The question about the rate of evolution must now be turned around: does evolution ever proceed gradually, or does it always occur in short bursts? Detailed field studies of thick rock formations containing fossils provide the best potential tests of the competing theories.

**Occasionally**, a sequence of fossil-rich layers of rock permits a comprehensive look at one type of organism over a long period of time. For example, Peter Sheldon's studies of trilobites, a now extinct marine animal with a segmented body, offer a detailed glimpse into three million years of evolution in one marine environment. In that study, each of eight different trilobite species was observed to undergo a gradual change in the number of segments—typically an increase of one or two segments over the whole time interval. No significant discontinuities were observed, leading Sheldon to conclude that environmental conditions were quite stable during the period he examined.

■ Similar exhaustive studies are required for many different kinds of organisms from many different periods.  
 ■ Most researchers expect to find that both modes of transition from one species to another are at work in evolution. ■ Slow, continuous change may be the norm during periods of environmental stability, while rapid evolution of new species occurs during periods of environment stress. ■ But a lot more studies like Sheldon's are needed before we can say for sure.

1. The word “innumerable” in the passage is closest in the meaning to
  - (A) countless
  - (B) occasional
  - (C) large
  - (D) repeated
2. According to paragraph 1, all of the following are true EXCEPT
  - (A) Darwin saw evolutionary change as happening slowly and gradually
  - (B) Gaps in the fossil record were used to explain why it is difficult to see continuous small changes in the evolution of species
  - (C) Darwin’s evolutionary thesis was rejected because small changes could not be observed in the evolutionary record
  - (D) By the early twentieth century, most biologists believed that gradualism explained evolutionary change
3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The punctuated equilibrium hypothesis challenged gradualism, which holds that species evolve in relatively sudden bursts of brief duration.
  - (B) The punctuated equilibrium hypothesis developed by Stephen Jay Gould and Niles Eldredge was challenged in 1972.
  - (C) In 1972 Stephen Jay Gould and Niles Eldredge challenged gradualism by positing that change from one species to another cannot occur without a lengthy transition period.
  - (D) The punctuated equilibrium hypothesis, in opposition to gradualism, holds that transitions from one species to another occur in comparatively sudden bursts.
4. According to paragraph 1 and paragraph 2, the punctuated equilibrium hypothesis and the gradualism hypothesis differed about
  - (A) Whether the fossil record is complete
  - (B) Whether all species undergo change
  - (C) Whether evolution proceeds at a constant rate
  - (D) How many new species occur over long periods of time
5. According to paragraph 3, the lack of intermediate fossils in the fossil record of some species
  - (A) has been extensively studied by paleontologists for over a century
  - (B) contradicts the idea that most species have remained unchanged for millions of years
  - (C) challenges the view that evolutionary change is gradual
  - (D) is most common in the fossil records of clam and coral species
6. The word “compelling” in the passage is closest in the meaning to
  - (A) surprising
  - (B) persuasive
  - (C) controversial
  - (D) detailed
7. Paragraph 4 mentions that North American horses have changed in all the following ways EXCEPT in
  - (A) the number of toes they have
  - (B) the length of their face
  - (C) their overall size
  - (D) the number of years they live
8. The word “alteration” in the passage is closest in meaning to
  - (A) imperfection
  - (B) replacement
  - (C) change
  - (D) duplication

9. According to paragraph 7, Peter Sheldon's studies demonstrated which of the following about trilobites?

- (A) They underwent gradual change over a long time period.
- (B) They experienced a number of discontinuous transitions during their history.
- (C) They remained unchanged during a long period of environmental stability.
- (D) They evolved in ways that cannot be counted for by either of the two competing theories.

10. The word "Occasionally" in the passage is closest in meaning to

- (A) undoubtedly
- (B) basically
- (C) once in a while
- (D) to some extent

11. The main purpose of paragraph 7 is to

- (A) Describe one test of the competing theories
- (B) Provide an example of punctuated equilibrium
- (C) Describe how segmented animals evidence both competing theories
- (D) Explain why trilobites became extinct

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

They believe that environmental conditions may play a crucial role in determining which of the two modes will be in operation over a given period.

Where would the sentence best fit?

13. Directions: selected from the seven phrases below the phrases that correctly characterize punctuated equilibrium and the phrases that correctly characterize gradualism. Two of the phrases will not be used. This question is worth 3 points.

Gradualism (THREE):

Punctuated Equilibrium (TWO):

Answer choices

- (A) States that new species emerge from existing species during relatively brief period of time
- (B) Was first formulated by Charles Darwin
- (C) Explain why North American horses have become smaller over time
- (D) States that new species evolve slowly and continuously from existing species
- (E) Explain the lack of intermediate fossil forms in the fossil record of many species
- (F) Competition is usually strongest when the density of the competing populations is the same
- (G) States that a species will not change unless its environment changes

## 笔记区

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## 参考答案与解析

1. 选 **A**。innumerable 不可计数的，A 是无数的，B 是偶然的，C 是大的，D 是重复的。这个单词是 numerable 加否定前缀，很容易就能推出意思来。
2. 选 **C**。A 答案对应第一段第二句，B 对应第一段第三句，D 对应一段最后一句。C 与原文冲突，原文一直在说 Darwin 理论被人们广泛接受。
3. 选 **D**。划线句子的主干部分是断点平衡论挑战了原来的渐进论，然后解释了断点平衡论的内容。A 选项原文没提到 brief duration；B 选项与原文矛盾，C 与原文不符，原文 S 和 N 的观点是 change 的发生是 without lengthy transition 的。D 和原文意思相符，并且也包含了所有的主干部分。
4. 选 **C**。根据原文，渐进论是说物种演变是通过长时间的缓慢改变发生的；断点平衡论是说物种演变是短期爆发的。所以选择 C，进化是否是匀速发生的。
5. 选 **C**。根据 lack of intermediate fossils 定位到第三段倒数第二句，在往前看一句说，这一情况对于达尔文学说是不和的，而达尔文学说正是渐进论，这一段的最后也说原来的物种突然被替换，而不是渐渐进化改变的。所以 C 符合原文意思。A 与原文第一句破折号后矛盾，原文说这一现象一直被 ignored，B 选项原文矛盾，该现象应该是反对了达尔文学说，支持了物种有长期不改变的论点。D 虽然正确但是只是本段的细节，不能表达主题，所以不选。
6. 选 **B**。compel 本身是强迫，而 compelling 作为形容词还有“引人入胜”之意。A 是惊奇的，C 是有争议的，D 是细节的。
7. 选 **D**。排除题，对应部分在第四段的第二句和第五句，只有 D 选项没有出现。
8. 选 **C**。这一句话说一个怎么样的单一基因就足以变一个普通飞禽的一对的正常翅为两对翅膀，所以有推理应该是要改变这个基因。所以选 C，alteration 是修改，变更，A 选项是不完美，B 是替换，D 是复制。
9. 选 **A**。根据 Peter Sheldon 定位到原文第二句。后面对 trilobites 进行了描述，A 选项对应了原文第三句，后文又继续说没有明显的断点，所以 A 正确。B 与原文第四句冲突。C 与第三句冲突，D 原文没有这种说法。而且上文也表明它符合 gradual evolution。
10. 选 **C**。occasionally 是偶然、偶尔的意思。A 是毫无疑问的，B 是基本上，C 是偶尔有一次。D 是在一定程度上。
11. 选 **A**。上文说实地勘测会给 competing theories 提供 test，第七段就给了试验例子，那么就证明是 A 正确。B 与原文冲突，这个例子是支持渐进论的。C 也不对，理由同上。D 与原文目的不符。
12. 选 **C**。首先句子开头出现了 They，那么我们应该能在前文找到一个提到人物的地方，句子又提出 environmental condition 的作用，那么后文应该会出现对这一理论的解释，那么 C 是符合的，也可以进行带入验证。
13. Gradualism 选 **BDG**；Punctuated Equilibrium 选 **AE**。A：断点平衡论论点为物种变化发生突然，快速，符合；B：对应文章第一段第一句话，符合渐进论；C：与原文第四段第二句矛盾，原文说马进化会变大，不选；D：原文第一段第一句，符合渐进论；E：对应原文第三段，符合点断平衡论；F：原文没提到，不选；G：原文最后一段，说渐进论应该会是环境比较稳定的情况下的进化规则，符合渐进论。



**自我评价**

用时：      分      秒

难度：易 / 中 / 难

错误：      个

**The Invention of the Mechanical Clock**

In Europe, before the introduction of the mechanical clock, people told time by sun (using, for example, shadow sticks or sun dials) and water clocks. Sun clocks worked, of course, only on clear days; water clocks misbehaved when the temperature fell toward freezing, to say nothing of long-run drift as the result of sedimentation and clogging. Both these devices worked well in sunny climates; but in northern Europe the sun may be hidden by clouds for weeks at a time, while temperatures vary not only seasonally but from day to night.

Medieval Europe gave new importance to reliable time. The Catholic Church had its seven daily prayers, one of which was at night, requiring an alarm arrangement to waken monks before dawn. And then the new cities and towns, squeezed by their walls, had to know and order time in order to organize collective activity and ration space. They set a time to go to sleep. All this was compatible with older devices so long as there was only one authoritative timekeeper; but with urban growth and the multiplication of time signals, discrepancy brought discord and strife. Society needed a more dependable instrument of time measurement and found it in the mechanical clock.

We do not know who invented this machine, or where. It seems to have appeared in Italy and England (perhaps simultaneous invention) between 1275 and 1300. Once known, it spread rapidly, driving out water clocks but not solar dials, which were needed to check the new machines against the timekeeper of last resort. These early versions were rudimentary, inaccurate, and prone to breakdown.

Ironically, the new machine tended to undermine Catholic Church authority. Although church ritual had sustained an interest in timekeeping throughout the centuries of urban collapse that followed the fall of Rome, church time was nature's time. ■ Day and night were divided into the same number of parts, so that except at the equinoxes, days and night hours were unequal; and then of course the length of these hours varied with the seasons. ■ But the mechanical clock kept equal hours, and this implied a new time reckoning. ■ The Catholic Church resisted, not coming over to the new hours for about a century. ■ From the start, however, the towns and cities took equal hours as their standard, and the public clocks installed in town halls and market squares became the very symbol of a new, secular municipal authority. Every town wanted one; conquerors seized them as especially precious spoils of war; tourists came to see and hear these machines the way they made pilgrimages to sacred relics.

The clock was the greatest achievement of medieval mechanical ingenuity. Its general accuracy could be checked against easily observed phenomena, like the rising and setting of the sun. The result was relentless pressure to improve technique and design. At every stage, clockmakers led the way to accuracy and precision; they became masters of miniaturization, detectors and correctors of error, searchers for new and better. They were thus the pioneers of mechanical engineering and served as examples and teachers to other branches of engineering.

The clock brought order and control, both collective and personal. Its public display and private possession laid the basis for temporal autonomy: people could now coordinate comings and goings without dictation from above. The clock provided the punctuation marks for group activity, while enabling individuals to order their own work (and that of others) so as to enhance productivity. Indeed, the very notion of productivity is a by-product of the clock: once one can relate performance to uniform time units, work is never the same. One moves from the task-oriented time consciousness of the peasant (working on job after another, as time and light permit) and the time-filling busyness of the domestic servant (who always had something to do) to an effort to maximize product per unit of time.

1. **Why does the author provide the information that “in northern Europe the sun may be hidden by clouds for weeks at a time, while temperatures vary not only seasonally but from day to night”?**
  - (A) To emphasize the variety of environments in which people used sun and water clocks to tell time
  - (B) To illustrate the disadvantage of sun and water clocks
  - (C) To provide an example of an area where water clocks have an advantage over sun clocks
  - (D) To counter the claim that sun and water clocks were used all over Europe
2. **According to paragraph 2, all of the following are examples of the importance of timekeeping to medieval European society EXCEPT**
  - (A) the need of different towns to coordinate timekeeping with each other
  - (B) the setting of specific times for the opening and closing of markets
  - (C) the setting of specific time for the start and finish of the working day
  - (D) the regulation of the performance of daily church rituals
3. **According to paragraph 2, why did the medieval church need an alarm arrangement?**
  - (A) The alarm warned the monks of discord or strife in the town.
  - (B) The church was responsible for regulating working hours and market hours.
  - (C) The alarm was needed in case fires were not put out each night.
  - (D) One of the church’s daily rituals occurred during the night.
4. **The word “authoritative” in the passage is closest in meaning to**
  - (A) actual
  - (B) important
  - (C) official
  - (D) effective
5. **The author uses the phrase “the timekeeper of last resort” to refer to**
  - (A) water clocks
  - (B) the sun
  - (C) mechanical clocks
  - (D) the church
6. **The word “rudimentary” in the passage is closest in meaning to**
  - (A) rare
  - (B) small
  - (C) impractical
  - (D) basic
7. **According to paragraph 4, how did the Catholic Church react to the introduction of mechanical clocks?**
  - (A) It used mechanical clocks through the period of urban collapse.
  - (B) It used clocks to better understand natural phenomena, like equinoxes.
  - (C) It tried to preserve its own method of keeping time, which was different from mechanical-clock time.
  - (D) It used mechanical clocks to challenge secular, town authorities.
8. **The word “installed” in the passage is closest in meaning to**
  - (A) required
  - (B) expected by the majority of people
  - (C) standardized
  - (D) put in place
9. **It can be inferred from paragraph 5 that medieval clockmakers**
  - (A) were able to continually make improvements in the accuracy of mechanical clocks
  - (B) were sometimes not well respected by other engineers
  - (C) sometimes made claims about the accuracy of mechanical clocks that were not true
  - (D) rarely shared their expertise with other engineers
10. **Paragraph 5 answers which of the following questions about mechanical clocks?**
  - (A) How did early mechanical clocks work?
  - (B) Why did the design of mechanical clocks affect engineering in general?
  - (C) How were mechanical clocks made?

(D) What influenced the design of the first mechanical clock?

**11. The word “pioneers” in the passage is closest in meaning to**

- (A) leaders
- (B) opponents
- (C) employers
- (D) guardians

**12. According to paragraph 6, how did the mechanical clock affect labor?**

- (A) It encouraged workers to do more time-filling busywork.
- (B) It enabled workers to be more task oriented.
- (C) It pushed workers to work more hours every day.
- (D) It led to a focus on productivity.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The division of time no longer reflected the organization of religious ritual.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The introduction of the mechanical clock caused important changes to the society of medieval Europe.

**Answer choices**

- (A) The increasing complexity of social and economic activity in medieval Europe led to the need for a more dependable means of keeping time than sun and water clocks provided.
- (B) Because they were unreliable even in sunny climates, sun clocks and water clocks were rarely used in Europe, even before the invention of the mechanical clock.
- (C) Before the mechanical clock, every city wanted a large number of timekeepers because more timekeepers allowed for better organization of collective activities.
- (D) Soon after the invention of mechanical clocks, sun and water clocks became obsolete because mechanical clocks were far more accurate.
- (E) Predators help maintain biological diversity by limiting populations of a dominant competitor species, thereby preventing that species from excluding others.
- (F) The removal of sea stars reduces the diversity of the community in which they are predators, and is therefore a bad idea.

### 参考答案与解析

1. 选 **B**。第一段的第二句开始，原文列举了这两种 device 各种的缺点，最后一句前半句说它们 work，后面 but 表转折，证明要说有些情况它们不能用。所以选择 B。A 说人们在各种情况下都在使用这两种方法，与原文表达的意思相反，C 将两种方法比较，原文没有这层意思。D 整个和划线部分相反，原文说在 northern Europe 不能用。
2. 选 **A**。虽然原文提到说城与城之间要保持一致，但其目的是 organize collective activity，和 ration space。而 collective activity 对应了选项 B，C 对应 set time to go to sleep，也就是结束工作的时间。D 对应开头 catholic church 的 prayers 活动。
3. 选 **D**。对应原文的第二句话，可根据 alarm arrangement 定位，前文说 one of which was at night，后面说 to waken monk before dawn，这两个都可以算是原因，选项中符合的只有 D。
4. 选 **C**。authoritative 是权威的，A 是真实的，B 是重要的，C 是官方的，D 是有效的。
5. 选 **B**。前文说需要它去 check 这个 machines，which 前面说的是 solar dials 所以指的是 the sun。
6. 选 **D**。rudimentary 是基础的。A 是稀有的，B 是小的，C 是不切实际的，D 是基本的。
7. 选 **C**。关键词为 resisted，not coming over，所以证明 church 在拒绝新的计时方法，也就是在试着保护自己的方法。因此选 C。
8. 选 **D**。installed 被安装的，A 是需要的，B 是被大部分人们希望的，C 是标准化的，D 是放置于。
9. 选 **A**。根据 clockmaker 定位至倒数第二句，说制表人是正确和精密的领路人然后就对他们各种赞扬。BCD 选项都是在贬低制表人，所以很容易排除。BD 选项又和最后一句话明显冲突。A 符合原文，选。
10. 选 **B**。第五段主要说 clockmaker 引领了准确，精准工程的发展，他们是 master，teacher 等等，然后说他们是先锋，但这些都是因为他们是制表人。所以这道题选 B。ACD 原文都没提到。
11. 选 **A**。pioneer 是先驱，A 是领导者，B 是对手，C 是雇主，D 是监护人。
12. 选 **D**。定位到原文最后一句，说使人们从 task-oriented 和 time-filling busyness 的模式变为 maximize product per unit of time，从而提高了 productivity，所以选择 D。AB 原文都提到了，但是转化前的状态，C 没提到。
13. 选 **C**。原句中 no longer 反应宗教仪式了，那么此句前后应该有对现在的计时制度的描写，另外句末提到了 religious ritual，所以附近也应该有对宗教组织的态度描写，满足这两个条件的位置是 C。
14. 选 **AEF**。A 对应第二段倒数第一句和倒数第二句后半句，正确，选；B 与原文第一段矛盾。不选；C 原文并没有提到说有大量的 timekeepers，而第三段还说只能有一个权威的 timekeeper，不选；D 对应原文第三段，说应用 mechanical clock 之后 water clock 很快被弃用了，但 sun clock 依然留下用来对照 mechanical clock 的准确性，错，不选；E 正确，对应原文第四段；F 正确，对应原文最后一段。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 自我评价

用时：     分     秒

难度：易 / 中 / 难

错误：     个

## Savanna Formation

Located in tropical areas at low altitudes, savannas are stable ecosystems, some wet and some dry consisting of vast grasslands with scattered trees and shrubs. They occur on a wide range of soil types and in extremes of climate. There is no simple or single factor that determines if a given site will be a savanna, but some factors seem to play important roles in their formation.

Savannas typically experience a rather **prolonged** dry season. One theory behind savanna formation is that wet forest species are unable to withstand the dry season, and thus savanna, rather than rain forest, is favored on the site. Savannas experience an annual rainfall of between 1,000 and 2,000 millimeters, most of it falling in a five- to eight-month wet season. Though plenty of rain may fall on a savanna during the year, for at least part of the year little does, creating the drought stress ultimately favoring grasses. Such conditions prevail throughout much of northern South America and Cuba, but many Central American savannas as well as coastal areas of Brazil and the island of Trinidad do not fit this pattern. In these areas, rainfall per month exceeds that in the above definition, so other factors must contribute to savanna formation.

In many characteristics, savanna soils are similar to those of some rain forests, though more extreme. For example, savanna soils, like many rain forest soils, are typically oxisols (dominated by certain oxide minerals) and ultisols (soils containing no calcium carbonate), with a high acidity and **notably** low concentrations of such minerals as phosphorus, calcium, magnesium, and potassium, while aluminum levels are high. Some savannas occur on wet, waterlogged soils; others on dry, sandy, well-drained soils. This may seem contradictory, but it only means that extreme soil conditions, either too wet or too dry for forests, are satisfactory for savannas. More moderate conditions support moist forests.

Waterlogged soils occur in areas that are flat or have poor drainage. These soils usually contain large amounts of clay and easily become water saturated. Air cannot penetrate between the soil particles, making the soil oxygen-poor. By contrast, dry soils are sandy and porous, their coarse textures permitting water to drain rapidly. Sandy soils are prone to the leaching of nutrients and minerals and so tend to be nutritionally poor. Though most savannas are found on sites with poor soils (because of either moisture conditions or nutrient levels of both), **poor soils can and do support lush rain forest.**

Most savannas probably experience mild fires frequently and major burns every two years or so. Many savanna and dry-forest plant species are called pyrophytes, meaning they are adapted in various ways to withstand occasional burning. **Frequent fire is a factor to which rain forest species seem unable to adapt, although ancient charcoal remains from Amazon forest soils dating prior to the arrival of humans suggest that moist forests also occasionally burn.** Experiments suggest that if fire did not occur in savannas in the Americas, species composition would change significantly. When burning occurs, it prevents competition among plant species from progressing to the point where some species exclude others, reducing the overall diversity of the ecosystem. But in experimental areas protected from fire, a few perennial grass species eventually come to dominate, outcompeting all others. ■ Evidence from other studies suggests that exclusion of fire results in **markedly** decreased plant-species richness, often with an increase in tree density. ■ There is generally little doubt that fire is a significant factor in maintaining savanna, certainly in most regions. ■

On certain sites, particularly in South America, savanna formation seems related to frequent cutting and burning of moist forests for pastureland. ■ Increase in pastureland and **subsequent** overgrazing have resulted in an expansion of savanna. The thin upper layer of humus (decayed organic matter) is destroyed by cutting and burning. Humus is necessary for rapid decomposition of leaves by bacteria and fungi and for recycling by surface roots. Once the humus layer disappears, nutrients cannot be recycled and leach from the soil, converting soil from fertile to infertile and making it suitable only for savanna vegetation. Forests on white, sandy soil are most susceptible to permanent alteration.

1. The word **“prolonged”** in the passage is closest in meaning to
  - (A) predictable
  - (B) destructive
  - (C) lengthy
  - (D) unproductive
2. In paragraph 2, the author mentions savannas in Central America, Brazil, and the island of Trinidad in order to
  - (A) Argue that these savannas are similar to those in South America and Cuba
  - (B) Point out exceptions to the pattern of savanna formation in areas with drought stress
  - (C) Provides additional examples of savannas in areas with five- to eight-month wet seasons
  - (D) Indicate areas where savannas are being gradually replaced by rain forests
3. According to paragraph 3, rain forests and savannas differ in that
  - (A) The soils in rain forests contain fewer minerals than savanna soils do
  - (B) Savannas affect soil conditions more than rain forests do
  - (C) Unlike rain forests, savannas prefer sandy, well-drained soils to soils that are very wet
  - (D) Unlike rain forests, savannas may develop under both very dry and very wet soil conditions
4. The word **“notably”** in the passage is closest in meaning to
  - (A) similarly
  - (B) especially
  - (C) usually
  - (D) relatively
5. According to paragraph 3, all of the following are true of savanna soils EXCEPT
  - (A) They have high concentrations of potassium.
  - (B) They contain high levels of aluminum.
  - (C) They are very acidic.
  - (D) They contain large amounts of certain oxide minerals.
6. According to paragraph 4, which of the following is true of waterlogged soils?
  - (A) Their upper layers are usually sandy and porous.
  - (B) They cannot support savannas.
  - (C) They contain little oxygen.
  - (D) They are prone to the leaching of nutrients and minerals.
7. The fact that **“poor soils can and do support lush rain forest”** suggests that
  - (A) Poor soils alone may not be enough to explain why an area becomes a savanna
  - (B) Rain forest vegetation can significantly lower the quality of soils
  - (C) Drought stress is the single most important factor in savanna formation
  - (D) Minerals are more important than moisture for the growth of trees
8. Which of the sentence below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) Rain forest species seem unable to adapt to fires created by humans.
  - (B) Ancient charcoal remains suggest that, prior to the arrival of humans, fires occurred frequently in rain forests.
  - (C) Ancient charcoal remains in Amazon forests suggest that rain forest species adapted to the area long before the arrival of humans.
  - (D) Rain forests species appear unable to adapt to frequent fires, but evidence from the past suggests that rain forests sometimes do burn.
9. The word **“markedly”** in the passage is closest in meaning to
  - (A) dangerously
  - (B) noticeably
  - (C) rapidly
  - (D) gradually

**10. Paragraph 5 supports which of the following statements regarding the importance of fires in maintaining savannas?**

- (A) Fires prevent the growth of pyrophytes.
- (B) Fires eliminate some species and thus reduce the overall diversity of the ecosystem.
- (C) Fires that occur once every two years are unlikely to help maintain savannas.
- (D) Fires prevent some species from eliminating other species with which they compete.

**11. The word “subsequent” in the passage is closest in meaning to**

- (A) expanded in area
- (B) harmful
- (C) following in time
- (D) repeated

**12. According to paragraph 6, human activity affects soils in all of the following ways EXCEPT**

- (A) Decomposition of leaves occurs too fast for surface roots to obtain nutrients.
- (B) Nutrients are not recycled.
- (C) Humus is destroyed.
- (D) Certain soils become unable to support vegetation other than savanna vegetation.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

In addition, humans have contributed to the conditions favoring the formation of savannas.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Several factors seem to play important roles in savanna formation.

**Answer choices**

- (A) Savannas can form in areas with a five- to eight-month wet season, but they more commonly have a longer wet season.
- (B) Soil stress caused by drought, extreme moisture, or low nutrient levels favors the formation of savannas.
- (C) Studies conducted in various regions indicate that an upper layer of white, sandy, soil is present in most permanent savannas.
- (D) Drought stress affects trees and shrubs in savannas far less than it affects savanna grasses.
- (E) Frequent fires is a major factor contributing to the formation and maintenance of savannas.
- (F) In some areas, human cutting and burning is associated with savanna formation, and increase in pastureland has led to savanna expansion.

## 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

## 参考答案与解析

1. 选 **C**。可以根据词根分析，原文中 prolonged，词根为 long，长度。prolonged 为延长的。选项中 C。length 本来是长度的意思，lengthy 变为形容词格式，符合原词词义。
2. 选 **B**。以 savannas in Central America, Brazil, and the island of Trinidad 作为关键词定位，看到这半句和前半句中间有 but 的转折，那么也就是说 central America, Brazil 这些地方和前面介绍的不一樣，所以是例外情况。
3. 选 **D**。本段第一句就指出，rain forest 和 savannas 的土壤是相似的，但是更极端一点。后面就给了 examples。最后一句给出了两种土壤的总结 “this may seem... Either too wet or too dry for forests”，所以选 D。
4. 选 **B**。notably 从 notice 发展而来，显著的。因此选择 B。另外也可通过 and 的并列格式来推断。
5. 选 **A**。这一题对应 for example 后面的内容，因此是要选 except 的选项。
6. 选 **C**。A 对应 by contrast... 那一句，sandy soil 和 waterlogged soils 是相反的；B 与原文矛盾，上段最后就说要么很干要么很湿，waterlogged 就是很湿的那种；C 对应 making the soil oxygen-poor；D 对应 Sandy soils are prone to...，而不是选项中说的 waterlogged soils 的特征。
7. 选 **A**。这句话说虽然几乎全部的 savannas 都发生在 poor soils 之上，但是 poor soils 足以支撑茂盛的热带雨林。所以是转折，说明 poor soils 不是唯一决定了 savannas 的因素，还有别的。
8. 选 **D**。原句主干是说 frequent fire 是造成热带雨林不能形成的原因，即使在人类出现之前亚马逊雨林也出现过偶尔的燃烧。所以 D 是意思最完整的。可根据转折关系来判断。
9. 选 **B**。根据词根判断，原词词根为 mark，意为标注，跟选项中 B 的 notice 意思相近，所以选 B。
10. 选 **D**。对应部分从 but in experimental areas protected from fire 开始，后面的内容都对其重要性进行了解释，如果没有火来保持 savannas，那么就很少有 perennial grass species 可以 outcompeting 其他的种类，从而减少了 plant-species 的丰富，而树的密度则会更大。对应了 D 的描述。
11. 选 **C**。subsequence 是后果的意思，subsequent 就是后来，然后的意思，因此选择 C。
12. 选 **A**。human activity 包括了 cutting and burning，然后这句的后面，从 increase... 开始就是后果。先说 humus is destroyed，对应 C；然后 humus 对于 decomposition 是非常必要的，而 human activity destroyed humus，所以减慢了 decomposition，和 A 矛盾；后面说 nutrients cannot be recycled，对应了 B；converting 那一句对应了 D。
13. 选 **C**。要插入的句子描述的是 savannas 的形成原因，并且开头是 in addition，证明是对前面句子的补充，前面句子说的应该是 savannas 形成的原因之一，对应了第二句。并且第三空后面的句子提到了 cutting 和 burning，这些都是 human activity，所以选 C。
14. 选 **BEF**。A 选项错误，对应原文第二段第一句，savannas 有 prolong dry season；B 选项对应原文第二段；C 选项错误，原文并没有这么说，只是说 sandy 是 savannas 的一种 soil；D 选项错误，savannas 本身就树和 shrubs 就少，原文并没有对干旱压力做出这样的对比；E 选项对应原文到对第二段；F 选项对应原文倒数第一段。



**自我评价**

用时：     分     秒

难度：易 / 中 / 难

错误：     个

**Speciation in Geographically Isolated Populations**

Evolutionary biologists believe that speciation, the formation of a new species, often begins when some kind of physical barrier arises and divides a population of a single species into separate subpopulations. Physical separation between subpopulations **promotes** the formation of new species because once the members of one subpopulation can no longer mate with members of another subpopulation, they cannot exchange variant genes that arise in one of the subpopulations. In the absence of gene flow between the subpopulations, genetic differences between the groups begin to **accumulate**. Eventually the subpopulations become so genetically distinct that they cannot interbreed even if the physical barriers between them were removed. At this point the subpopulations have evolved into distinct species. This route to speciation is known as allopatry (*allo-* means *different*, and *patria* means *homeland*).

Allopatric speciation may be the main speciation route. This should not be surprising, since allopatry is pretty common. In general, the subpopulations of most species are separated from each other by some measurable distance. So even under normal situations the gene flow among the subpopulations is more of an intermittent trickle than a steady stream. In addition, barriers can rapidly arise and shut off the trickle. For example, in the 1800s a monstrous earthquake changed the course of the Mississippi River, a large river flowing in the central part of the United States of America. The change separated populations of insects now living along opposite shores, completely cutting off gene flow between them.

Geographic isolation can also proceed slowly, over great spans of time. We find evidence of such extended events in the fossil record, which affords glimpse into the breakup of formerly continuous environments. For example, during past ice ages, glaciers advanced down through North America and Europe and gradually cut off parts of populations from one another. When the glaciers retreated, the separated populations of plants and animals came into contact again. Some groups that had descended from the same parent population were no longer reproductively compatible—they had evolved into separate species. In other groups, however, genetic divergences had not proceeded so far, and the descendants could still interbreed—for them, reproductive isolation was not completed, and so speciation had not occurred.

Allopatric speciation can also be brought by the imperceptibly slow but **colossal** movements of the tectonic plates that make up Earth's surface. ■ About 5 million years ago such geologic movements created the land bridge between North America and South America that we call the Isthmus of Panama. ■ While previously the gap between the continents had allowed a free flow of water, now the isthmus presented a barrier that divided the Atlantic Ocean from the Pacific Ocean. ■ This division set the stage for allopatric speciation among populations of fishes and other marine species. ■

In the 1980s, John Graves studied two populations of closely related fishes, one population from the Atlantic side of isthmus, the other from the Pacific side. He compared four enzymes found in the muscles of each population. Graves found that all four Pacific enzymes function better at lower temperatures than the four Atlantic versions of the same enzymes. This is significant because Pacific seawater is typically 2 to 3 degrees cooler than seawater on the Atlantic side of isthmus. Analysis by gel electrophoresis revealed slight differences in amino acid **sequence** of the enzymes of two of the four pairs. This is significant because the amino acid sequence of an enzyme is determined by genes.

Graves drew two conclusions from these observations. First, at least some of the observed differences between the enzymes of the Atlantic and Pacific fish populations were not random but were the result of evolutionary adaptation. Second, it appears that closely related populations of fishes on both sides of the isthmus are starting to genetically diverge from each other. **Because Graves' study of geographically isolated populations of isthmus fishes offers a glimpse of the beginning of a process of gradual accumulation of mutations that are neutral or adaptive, divergences here might be evidence of allopatric speciation in process.**

1. The word **“promotes”** in the passage is closest in meaning to
  - (A) describes
  - (B) encourages
  - (C) delays
  - (D) requires
2. According to paragraph 1, allopatric speciation involves which of the following?
  - (A) The division of a population into subspecies
  - (B) The reuniting of separated populations after they have become distinct species
  - (C) The movement of a population to a new homeland
  - (D) The absence of gene flow between subpopulations
3. Why does the author provide the information that **“subpopulations of most species are separated from each other by some measurable distance”**?
  - (A) To indicate how scientists are able to determine whether subpopulations of a species are allopatric
  - (B) To define what it means for a group of animals or plants to be a subpopulation
  - (C) To suggest that allopatric speciation is not the only route to speciation
  - (D) To help explain why allopatric speciation is a common way for new species to come about
4. The word **“accumulate”** in the passage is closest in meaning to
  - (A) become more significant
  - (B) occur randomly
  - (C) gradually increase in number
  - (D) cause changes
5. In paragraph 2, why does the author mention that some insect populations were separated from each other by a change in the course of Mississippi River caused by an earthquake?
  - (A) To make the point that some kind of physical barrier separates the subpopulations of most species
  - (B) To support the claim that the condition of allopatry can sometimes arise in a short time
  - (C) To provide an example of a situation in which gene flow among the populations a species happens at a slow rate
  - (D) To explain why insect living along opposite shores of the Mississippi River are very different from each other
6. According to paragraph 3, separation of subpopulations by glaciers resulted in speciation in those groups of plants and animals that
  - (A) Were reproductively isolated even after the glaciers disappeared
  - (B) Had adjusted to the old conditions caused by the glaciers
  - (C) Were able to survive being separated from their parent population
  - (D) Had experienced some genetic divergences from their parent population
7. The word **“colossal”** in the passage is closest in meaning to
  - (A) consistent
  - (B) gradual
  - (C) enormous
  - (D) effective
8. According to paragraph 4, which of the following is true of the geologic movements that brought about the Isthmus of Panama?
  - (A) The movements brought populations of certain fishes and marine organisms into contact with one another for the first time.
  - (B) The movements transferred populations of fishes and other marine animals between the Pacific and Atlantic Oceans.
  - (C) The movement created conditions that allowed water to flow more freely between the Pacific and Atlantic Oceans.
  - (D) The movement created conditions for the formation of new species of fishes and other marine animals.
9. The word **“sequence”** in the passage is closest in meaning to
  - (A) quality

- (B) order
- (C) function
- (D) number

**10. According to paragraph 5, by comparing the enzymes from two related groups of fishes on opposite sides of the isthmus, Graves found evidence that**

- (A) There were slight genetic divergences between the two groups
- (B) The Atlantic group of fishes were descended from the Pacific group of fishes
- (C) The temperature of water on either side of the isthmus had changed
- (D) Genetic changes in the Atlantic group of fishes were more rapid and frequent than in the Pacific group of fishes

**11. It can be inferred from paragraph 5 and 6 that the reason Graves concluded that some of the differences between the Pacific and Atlantic enzymes were not random was that**

- (A) Each of the Pacific enzymes works better in cooler waters
- (B) The enzymes of the Atlantic fish populations had not changed since the formation of the Isthmus of Panama
- (C) Gel electrophoresis showed that the changes benefited both the Atlantic and the Pacific fish populations
- (D) The differences between the enzymes disappeared when the two fish populations were experimentally switched to other side of the isthmus

**12. Which of the sentence below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Graves's study provides evidence that isthmus fishes are in the process of becoming geographically isolated.
- (B) Graves's study of mutating isthmus fishes yields results that differ from results of other studies involving allopatric speciation.
- (C) Graves's study of isolated populations of isthmus fishes provides some evidence that allopatric speciation might be beginning.
- (D) Graves's study indicates that when isolated, populations of isthmus fishes register neutral or adaptive mutations.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The formation of the isthmus had important consequences for global patterns of ocean water flow.

**Where would the sentence best fit?**

**14. Prose summary. This question is worth 2 points.**

Allopatric speciation takes place when physically separated populations of a single species gradually diverge genetically to the point of becoming unable to interbreed.

**Answer choices**

- (A) Allopatric speciation is common because the gene flow between subpopulations is generally limited and the barriers that completely separate subpopulations can arise in a variety of ways.
- (B) During past ice ages, some, but not all, subpopulations separated by glaciers evolved into distinct species.
- (C) Speciation does not need to take place through allopatry because subpopulations will form distinct species whenever there are adaptive advantages to not interbreeding with other subpopulations.
- (D) Physical barriers from glaciers and the movement of tectonic plates form so slowly that the subpopulations on either side of the barriers usually do not form distinct species.
- (E) Graves's study of fish populations separated by the Isthmus of Panama may well provide a picture of the beginning stages of speciation.
- (F) Graves's study of physically separated fish populations show that there must be large differences between the environments of the isolated populations if allopatric speciation is to take place.

### 参考答案与解析

1. 选 **B**。promote 本身是促进的意思。另外原文这个句子意思是 subpopulations 间的物理分割…了新物种的形成，A 描述，B 促使，C 减弱，D 要求。所以 B 最合适的。
2. 选 **D**。根据 allopatric 进行定位，可定位至本段的最后一句。最后一句是对前面现象的一个命名和定义。也就是说前面的内容，就是 allopatry 的意思。A 与原文不附，原文说的是物理 barrier 把 population 分割成 subpopulation。B 也不对，对应 Eventually 这句。C 原文没提到。D 正确，对应从 In the absence 开始到最后。
3. 选 **D**。高亮句前面的一句话，也就是本段的第一句（主旨句），allopatry 是 main speciation route，本段都是围绕着这个主题来进行的，所以选择 D。
4. 选 **C**。词汇所在句说群落间基因的区别开始 accumulate。eventually 对理解这个词很有帮助。怎么怎么样了，最终达到了后面这句的效果。那么也就是说是在渐渐发展的，才能说最终。所以答案在 A，C 之间。但因为这里强调了缓慢的过程，gradually 更合适。
5. 选 **B**。for example 后面就是题目中的内容，那么也就是说作者用此作为例子来支持前面的观点。而前面的观点是 barriers 也有可能突然发生，然后截断了这种 trickle，所以对应的是 B。
6. 选 **A**。根据 glaciers 和 plants and animals 定位。红色句子就是 glacier separation 导致的结果，所以对应选项 A。
7. 选 **C**。colossal 本身是巨大的，非常的意思，这里对应 C 选项。分析原文也可以得到正确答案，与 colossal 并列的词汇是 slow，中间的逻辑关系词是 but，证明两者有转折关系。再经过推断，缓慢的过程但量大的话就足以发生巨大的改变，所以选 C。
8. 选 **D**。根据 isthmus of Panama 定位。从 about 开始，本段的最后一句说了 isthmus of Panama 带来的结果，对应了 D 选项。
9. 选 **B**。B 高亮词所在句提到了氨基酸啊，酶啊，pairs 啊什么的，其实就是在说成对的基因呀，胶体电泳分析揭示了少量的氨基酸…的不同。A 质量，C 功能，D 数量都不对，应该选择 B 顺序，（了解一点生物相关知识就很容易明白啦）而且 sequence 本身也是序列，顺序的意思。
10. 选 **A**。跟上面一题对应的位置是一样的。或者可以根据 graves found 定位，阅读后面的部分可以很容易得出答案 A。
11. 选 **A**。A 对应了第五段中的 were not random，B 明显错误，文章一直在说改变。C 文章提到 gel electrophoresis 的地方只是说氨基酸的顺序改变了，但没说 both benefited。D 文章也没提到。
12. 选 **C**。原文高亮句翻译为：格雷夫斯关于地峡鱼类地域隔离的种群研究为中性或适应性突变的逐渐累积过程的开始提供了一些线索，这里的差异可能会给正在进行的异域性物种的形成提供证据。所以主干部分为…的研究为…的开始提供了线索，对应 C。
13. 选 **B**。要插入的句子提到了 formation of the isthmus，那么证明句子前面的内容中已经出现了 isthmus，而后面则是要说明 consequences。第二个空符合逻辑，所以选择 B。
14. 选 **ABE**。A 对应文章第二段；B 对应文章第三段；C 错误，与文章多处矛盾，文章一直在强调 allopatry 是最主要的 speciation route；D 错误，对应文章第三段，可参考词汇题 colossal 的分析，文章中不仅提到了 slow 也说到的大量，从而导致了 distinct species；E 与 12 题的对应位置一样；F 错误，与文章中词汇题 sequence 所再句矛盾，那一句提到了 slight difference。

### 笔记区

建议将生词和陌生的语法条目标记在这里，并时常翻看。

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**Early Childhood Education**

Preschools—educational programs for children under the age of five—differ significantly from one country to another according to the views that different societies hold regarding the purpose of early childhood education. For instance, in a cross-country comparison of preschools in China, Japan, and the United States, researchers found that parents in the three countries view the purpose of preschools very differently. Whereas parents in China tend to see preschools primarily as a way of giving children a good start academically, Japanese parents view them primarily as a way of giving children the opportunity to be members of a group. In the United States, in comparison, parents regard the primary purpose of preschools as making children more independent and self-reliant, although obtaining a good academic start and having group experience are also important.

While many programs designed for preschoolers focus primarily on social and emotional factors, some are geared mainly toward promoting cognitive gains and preparing preschoolers for the formal instruction they will experience when they start kindergarten. In the United States, the best-known program designed to promote future academic success is Head Start. Established in the 1960s when the United States declared the War on Poverty, the program has served over 13 million children and their families. The program, which stresses parental involvement, was designed to serve the “whole child”, including children’s physical health, self-confidence, social responsibility, and social and emotional development.

Whether Head Start is seen as successful or not depends on the lens through which one is looking. If, for instance, the program is expected to provide long-term increases in IQ (intelligence quotient) scores, it is a disappointment. Although graduates of Head Start programs tend to show immediate IQ gains, these increases do not last. On the other hand, it is clear that Head Start is meeting its goal of getting preschoolers ready for school. Preschoolers who participate in Head Start are better prepared for future schooling than those who do not. Furthermore, graduates of Head Start programs have better future school grade. Finally, some research suggests that ultimately Head Start graduates show higher academic performance at the end of high school, although the gains are modest.

In addition, results from other types of preschool readiness programs indicate that those who participate and graduate are less likely to repeat grades, and they are more likely to complete school than readiness program, for every dollar spent on the program, taxpayers saved seven dollars by the time the graduates reached the age of 27.

The most recent comprehensive evaluation of early intervention programs suggests that, taken as a group, preschool programs can provide significant benefits, and that government funds invested early in life may ultimately lead to a reduction in future costs. For instance, compared with children who did not participate in early intervention programs, participants in various programs showed gains in emotional or cognitive development, better educational outcomes, increased economic self-sufficiency, reduced levels of criminal activity, and improved health-related behaviors. Of course, not every program produced all these benefits, and not every child benefited to the same extent. Furthermore, some researchers argue that less-expensive programs are just as good as relatively expensive ones, such as Head Start. Still, the results of the evaluation were promising, suggesting that the potential benefits of early intervention can be substantial.

Not everyone agrees that programs that seek to enhance academic skills during the preschool years are a good thing. ■ In fact, according to developmental psychologist David Elkind, United States society tends to push children so rapidly that they begin to feel stress and pressure at a young age. ■ Elkind argues that academic success is largely dependent upon factors out of parents’ control, such as inherited abilities and a child’s rate of maturation. ■ Consequently, children of a particular age cannot be expected to master educational material without taking into account their current level of cognitive development. ■ In short, children require development appropriate educational practice, which is education that is based on both typical development and the unique characteristics of a given child.

1. **According to paragraph 1, parents in Japan tend to think of preschool primarily as a place where children can**
  - (A) Get a good academic start
  - (B) Expand their emotional development
  - (C) Become more independent
  - (D) Experience being part of a group
2. **The word “whereas” in the passage is closest in meaning to**
  - (A) although
  - (B) because
  - (C) moreover
  - (D) already
3. **The word “focus” in the passage is closest in meaning to**
  - (A) consider
  - (B) respect
  - (C) concentrate
  - (D) advise
4. **It can be inferred from paragraph 2 that the Head Start program was designed to serve children who**
  - (A) Come from families that do not have a lot of money
  - (B) Are not doing very well in kindergarten
  - (C) Were born in the 1950s
  - (D) Need programs that focus primarily on social and emotional factors
5. **According to paragraph 3, the Head Start program had NOT been successful at which of the following?**
  - (A) Helping children adjust to school
  - (B) Providing long-term increase in IQ scores
  - (C) Improving school performance throughout high school
  - (D) Preventing children from being placed in special-education classes
6. **In paragraph 4, the author mentions the “results from other types of readiness programs” to**
  - (A) Provide support for the idea that preschool readiness programs have been somewhat successful
  - (B) Question the idea that Head Start is more effective than other preschool readiness programs
  - (C) Indicate school completion is usually the most reliable indicator of success in most readiness programs
  - (D) Emphasize that participating in readiness programs can be increased if costs are reduced
7. **According to paragraph 4, a cost-benefit analysis of one preschool readiness program revealed that**
  - (A) Only one dollar’s worth of benefit was gained for every seven dollars spent on the program
  - (B) The benefits of the program lasted only until the participants reached age 27
  - (C) Taxpayers saved seven dollars for every dollar spent on the program
  - (D) To be successful, the program would need to receive about seven times as much money as it currently receives
8. **The word “comprehensive” in the passage is closest in meaning to**
  - (A) easily understood
  - (B) thorough
  - (C) respectable
  - (D) objective
9. **Paragraph 5 mentions that participants in early intervention programs have been shown to do all of the following better than nonparticipants EXCEPT**
  - (A) Take care of their health
  - (B) Support themselves financially
  - (C) Take care of their own children
  - (D) Have increased emotional development

**10. According to paragraph 5, which of the following is true about the benefits of early intervention programs?**

- (A) These programs produce good short-term benefits but few long-term benefits.
- (B) Only the most expensive programs provide substantial benefits.
- (C) The Head Start program provides a range of benefits that no other program can provide.
- (D) Some children benefit more than others do from these programs.

**11. The word “seek” in the passage is closest in meaning to**

- (A) claim
- (B) manage
- (C) fail
- (D) attempt

**12. The passage mentions “developmental psychologist David Elkind” in order to**

- (A) Give an example of an expert who has designed an effective early childhood education program
- (B) Introduce an alternative view about the value of early childhood education
- (C) Explain why early childhood education programs are less effective in the United States than in other countries
- (D) Refute the claim that academic success is dependent on factors outside parents’ control.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

According to Elkind, not only does this cause the child emotional distress, it also fails to bring the intended cognitive gains.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Preschool programs provide opportunities for young children to develop socially, emotionally, and cognitively.

**Answer choices**

- (A) In addition to stressing academic development, preschools should be enjoyable, since studies show that children benefit from programs they find fun.
- (B) Preschool programs such as Head Start have been shown to help prepare children for school and may also have long-term benefits in helping children become effective adults.
- (C) Studies have shown that preschool programs are most effective when they focus on only one area of development rather than trying to serve the “whole child”.
- (D) The primary purpose of preschool programs varies by country, with some stressing the importance of group experience, and others self-reliance or getting a good academic start.
- (E) Critics of preschool programs argue that these programs put undue pressure on children and may not be effective if children are not developmentally ready for academic work.
- (F) David Elkind is a critic of publicly funded preschool programs, arguing that the parent cannot control their children’s emotional development.

### 参考答案与解析

1. 选 **D**。根据题目中 parents in Japan, 定位至 Japanese parents...可直接得到答案 D。
2. 选 **A**。这里轻微对比了 China 和 Japanese 家长之间的差别, 所以 A 最合适。
3. 选 **C**。focus 是集中的意思, 另外这里和 focus 配合的介词是 on, concentrate 也用 on, 所以这里帮助推断。
4. 选 **A**。根据 Head Start 定位, 后面的内容就是对 Head Start 这个 program 的介绍, 首先是 1960 年开始的, 和 C 矛盾, 然后说是在 US 宣布了 Waron Poverty (贫穷) 的时候, 所以是为穷人设计的, 符合 A。B 没提到, D 在这段的开头提到了, 但是不是针对 Head Start 的描述, Head Start 目标是 “whole child”, 德智体美劳全面发展。
5. 选 **B**。B 对应文中 Although graduates of..., 其他的几个选项根据后文中的内容都是正确的。
6. 选 **A**。利用 results of readiness programs 定位到本段第一句, 本句内容说, 参加这些 program 留级的可能性小, 而且还能省钱。所以选 A。
7. 选 **C**。A 改变了原文意思, B 文章没说只到 27, D 和原文意思正好相反。
8. 选 **B**。comprehensive 是全面的, 综合的意思。A 最易懂的, B 完整的, C 值得尊敬的, D 客观的中, AC 可以排除, 不通顺, B 和 D 之间就需要理解 comprehensive 的词意来确定了。
9. 选 **C**。根据关键词定位至 For instance 开始的内容, 其中不包括 C。
10. 选 **D**。A 对应 “reduction in future costs” 证明是 long term 的 benefit, 所以 A 错误; B 对应 “less-expensive programs are just as good as relatively expensive ones”, 说明便宜和贵的一样好, B 选项也不对; C 没提到; D 对应 not every child benefited to the same extent, 正确。
11. 选 **D**。seek 本身是寻找, 追求的意思。A 是要求, B 是设法, 管理, C 是失败, D 是尝试, 所以 D 最合适。
12. 选 **B**。关键词对应后, 根据本段的第一句, Elkind 是作为反面观点的例子出现的, 所以是为了阐述另外一面的观点, 选 B。
13. 选 **B**。要插入的句子有 not only...also 的结构, 那么起到的就是承上启下的作用。句子前面一定出现过 emotional distress 的内容, 后面要引出的就是 intended cognitive gains 的相关内容, 所以选 B。
14. 选 **BDE**。A 选项原文没有提到; B 选项对应原文第 4 段; C 选项跟原文矛盾, whole children 是 “Head Start” 的主要目标, 而且文章也一直在说这个 program 很好; D 选项对应原文第一段, 不同国家家长有不同的观点; E 选项对应文章最后一段; F 选项对应原文最后一段, 但是文章并没有说 parent cannot control, 而是说这个是孩子能否成功的至关重要的因素。

### 笔记区

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错误：     个

**Plant Colonization**

Colonization is one way in which plants can change the ecology of a site. Colonization is a process with two components: invasion and survival. The rate at which a site is colonized by plants depends on both the rate at which individual organisms (seeds, spores, immature or mature individuals) arrive at the site and their success at becoming established and surviving. Success in colonization depends to a great extent on there being a site available for colonization—a safe site where disturbance by fire or by cutting down of trees has either removed competing species or reduced levels of competition and other negative interactions to a level at which the invading species can become established. For a given rate of invasion, colonization of a moist, fertile site is likely to be much more rapid than that of a dry, infertile site because of poor survival on the latter. A fertile, plowed field is rapidly invaded by a large variety of weeds, whereas a neighboring construction site from which the soil has been compacted or removed to expose a coarse, infertile parent material may remain virtually free of vegetation for many months or even years despite receiving the same input of seeds as the plowed field.

Both the rate of invasion and the rate of extinction vary greatly among different plant species. **Pioneer species—those that occur only in the earliest stages of colonization—tend to have high rates of invasion because they produce very large numbers of reproductive propagules (seeds, spores, and so on) and because they have an efficient means of dispersal (normally, wind).**

If colonizers produce short-lived reproductive propagules, then they must produce very large numbers unless they have an efficient means of dispersal to suitable new habitats. Many plants depend on wind for dispersal and produce abundant quantities of small, relatively short-lived seeds to compensate for the fact that wind is not always a reliable means of reaching the appropriate type of habitat. Alternative strategies have evolved in some plants, such as those that produce fewer but larger seeds that are dispersed to suitable sites by birds or small mammals or those that produce long-lived seeds. Many forest plants seem to exhibit the latter adaptation, and viable seeds of pioneer species can be found in large numbers on some forest floors. For example, as many as 1,125 viable seeds per square meter were found in a 100-year-old Douglas fir/western hemlock forest in coastal British Columbia. Nearly all the seeds that had germinated from this seed bank were from pioneer species. The rapid colonization of such sites after disturbance is undoubtedly in part a reflection of the large seed bank on the forest floor.

An adaptation that is well developed in colonizing species is a high degree of variation in germination (the beginning of a seed's growth). Seeds of a given species exhibit a wide range of germination dates, increasing the probability that at least some of the seeds will germinate during a period of favorable environmental conditions. This is particularly important for species that colonize an environment where there is no existing vegetation to ameliorate climatic extremes and in which there may be great climatic diversity.

Species succession in plant communities, i.e., the temporal sequence of appearance and disappearance of species is dependent on events occurring at different stages in the life history of a species. ■ Variation in rates of invasion and growth plays an important role in determining patterns of succession, especially secondary succession. ■ The species that are first to colonize a site are those that produce abundant seed that is distributed successfully to new sites. ■ Such species generally grow rapidly and quickly dominate new sites, excluding other species with lower invasion and growth rates. The first community that occupies a disturbed area therefore may be composed of species with the highest rate of invasion, whereas the community of the subsequent stage may consist of plants with similar survival rates but lower invasion rates. ■

1. **According to paragraph 1, how does disturbance of a site influence its colonization by a plant species?**
  - (A) Disturbance reduces or eliminates competition by other species.
  - (B) Disturbance increases negative interactions with other organisms on the site.
  - (C) Disturbance prevents a plant species from colonizing a new site.
  - (D) Disturbance reduces the fertility of a site.
2. **The word “virtually” in the passage is closest in meaning to**
  - (A) almost totally
  - (B) unusually
  - (C) consistently
  - (D) unnaturally
3. **Why does the author mention a plowed field and a construction site in the passage?**
  - (A) To argue that sites that have been affected by human activity tend to be colonized slowly.
  - (B) To illustrate the kind of sites that may be invaded by weeds.
  - (C) To contrast sites in terms of their suitability for colonization.
  - (D) To explain that exposing or compacting the soil results in successful colonization.
4. **The word “despite” in the passage is closest in meaning to**
  - (A) without
  - (B) almost never
  - (C) even though
  - (D) perhaps
5. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) The seeds of pioneer species are usually carried by the wind to fertile sites, where they reproduce very efficiently.
  - (B) Pioneer species are successful invaders because they produce lots of seeds that are dispersed effectively.
  - (C) Pioneer species produce their largest numbers of propagules during the earliest stages of their colonization.
  - (D) Pioneer species reproduce very quickly and efficiently because they produce very large number of seeds.
6. **What can be inferred from paragraph 3 about the reason that large seeds are dispersed by birds or small animals rather than by wind?**
  - (A) Large seeds are easier for birds and animals to see than are the small seeds dispersed by the wind.
  - (B) Large seeds are too heavy for the wind to disperse.
  - (C) Large seeds cannot be eaten by birds and animals.
  - (D) Large seeds are short-lived and thus require a more efficient means of dispersal than small seeds do.
7. **The phrase “the latter adaptation” in the passage refers to**
  - (A) producing fewer seeds
  - (B) producing larger seeds
  - (C) dispersal by birds and small mammals
  - (D) producing long-lived seeds
8. **The word “viable” in the passage is closest in meaning to**
  - (A) able to survive
  - (B) individual
  - (C) large
  - (D) remaining
9. **The example of the 100-year-old Douglas fir/western hemlock forest in paragraph to illustrates which of the following ideas?**
  - (A) It is uncommon for older seed to germinate.
  - (B) Pioneer species tend to prefer forest floors for colonization purposes.

- (C) Long-lived seeds of pioneer species can successfully germinate over long periods of time.
- (D) Coastal British Columbia is particularly suited for pioneer species to develop.

**10. According to paragraph 4, how do plants manage to germinate in areas with great climatic diversity and climatic extremes?**

- (A) By producing seeds only during favorable climatic conditions
- (B) By generating large numbers of seeds
- (C) By colonizing only those areas where other plants have survived
- (D) By producing seeds that have a wide range of germination dates

**11. The word “abundant” in the passage is closest in meaning to**

- (A) new
- (B) improved
- (C) suitable
- (D) plentiful

**12. According to paragraph 5, which of the following determines the sequence in which plant species will colonize a site?**

- (A) The extent of growth of a species on a prior site before it begins to colonize a secondary site
- (B) The differences in invasion and growth rates across species
- (C) The degree of fertility of a site
- (D) The kind of disturbance that the site has undergone

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

They require relatively little protection or nutrients.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The ecology of a site is changed through its colonization by new plants that arrive and grow there.

**Answer choices**

- (A) The species that first colonize a disturbed site are typically ones that produce a large number of efficiently dispersed seeds.
- (B) Plants that cannot successfully compete with other species can invade and colonize a site only if it is fertile and moist, such as a plowed field.
- (C) Pioneer species arrive at a site first but have lower survival rates than do species that arrive later.
- (D) Producing seeds that germinate at various times over long periods allows some plants to colonize sites that only occasionally present the right conditions for growth.
- (E) Large, long-lived seeds tend to result in large seed banks with short germination periods requiring favorable environmental conditions for development.
- (F) The successive appearance and disappearance of species on a site is a result of variation in species' rates of invasion, growth, and survival.

### 参考答案与解析

1. 选 **A**。第 1 段第 4 句话，通过火灾和砍伐的干涉要么消除竞争对手要么降低竞争的强度。
2. 选 **A**。virtually，实际上、几乎，程度上对应 almost totally。
3. 选 **C**。第一段第 5、6 句话，肥沃的土地植物入侵的速度快，反之亦然。
4. 选 **C**。despite，尽管，对应 even though。
5. 选 **B**。原句强调了先锋物种入侵速度快的 2 个原因，一是能够产生大量可繁殖的种子，二是拥有有效的传播途径。原句和 fertile sites 没有关系，A 错；C 没有提到种子的繁殖力；D 没有提到传播途径；只有 B 满足原句的条件。
6. 选 **B**。第 3 段第 2、3 句。小种子通常靠风传播，大种子由鸟和动物实现传播。
7. 选 **D**。the latter adaptation，后一种适应性，段落开头讲的是短命种子，所以后一种适应性是指长命种子。
8. 选 **A**。viable，有生命力的，对应 A。
9. 选 **C**。该例子的前一句话为观点句，例子是为了说明观点，即长命种子在森林地面上很繁荣。
10. 选 **D**。该段的第 1 句话，发芽时间的变化。
11. 选 **D**。abundant，丰富的，对应 D。
12. 选 **B**。该段第二句话，succession 对应 colonize a site。
13. 选 **C**。they 指代 species。原句说该物种的生存要求很低，就意味着他们更能存活，因此原句接下去可能阐述该物种如何靠着该优势来侵占土地繁殖。
14. 选 **ADF**。A 选项：对应第 2 段的核心意思，第 2 句话；B 选项：原文中没有明确说明的信息；C 选项：违背原文意思，第三段最后一句；D 选项：对应第 4 段的核心意思；E 选项：requiring favorable environmental conditions for development 是原文中没有明确说明的信息；F 选项：对应第 5 段的核心意思。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

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**Siam, 1851–1910**

In the late nineteenth century, political and social changes were occurring rapidly in Siam (now Thailand). The old ruling families were being displaced by an evolving centralized government. These families were pensioned off (given a sum of money to live on) or simply had their revenues taken away or restricted; their sons were enticed away to schools for district officers, later to be posted in some faraway province; and the old patron-client relations that had bound together local societies simply disintegrated. Local rulers could no longer protect their relatives and attendants in legal cases, and with the ending in 1905 of the practice of forcing peasant farmers to work part-time for local rulers, the rulers no longer had a regular base for relations with rural populations. The old local ruling families, then, were **severed** from their traditional social context.

The same situation viewed from the perspective of the rural population is even more complex. According to the government's first census of the rural population, taken in 1905, there were about thirty thousand villages in Siam. This was probably a large increase over the figure even two or three decades earlier, during the late 1800s. It is difficult to imagine it now, but Siam's Central Plain in the late 1800s was nowhere near as densely settled as it is today. There were still forests closely surrounding Bangkok into the last half of the nineteenth century, and even at century's end there were wild elephants and tigers roaming the countryside only twenty or thirty miles away.

Much population movement involved the opening up of new lands for rice cultivation. Two things made this possible and encouraged it to happen. First, the opening of the kingdom to the full force of international trade by the Bowring Treaty (1855) rapidly encouraged economic specialization in the growing of rice, mainly to feed the **rice-deficient portions** of Asia (India and China in particular). The average annual volume of rice exported from Siam grew from under 60 million kilograms per year in the late 1850s to more than 660 million kilograms per year at the turn of the century; and over the same period the average price per kilogram doubled. During the same period, the area planted in rice increased from about 230,000 acres to more than 350,000 acres. This growth was achieved as the result of the collective decisions of thousands of peasants' families to expand the amount of land they cultivated, clear and plant new land, or adopt more intensive methods of agriculture.

■ They were able to do so because of our second consideration. ■ They were relatively freer than they had been half a century earlier. ■ Over the course of the Fifth Reign (1868–1910), the ties that bound rural people to the aristocracy and local ruling elites were greatly reduced. Peasants now paid a tax on individuals instead of being required to render labor service to the government. ■ Under these conditions, it made good sense to thousands of peasant families to in effect work full-time at what they had been able to do only part-time previously because of the requirement to work for the government: grow rice for the marketplace.

Numerous changes accompanied these developments. The rural population both **dispersed** and grew, and was probably less homogeneous and more mobile than it had been a generation earlier. The villages became more vulnerable to arbitrary treatment by government bureaucrats as local elites now had less control over them. By the early twentieth century, as government modernization in a sense caught up with what had been happening in the countryside since the 1870s, the government bureaucracy intruded more and more into village life. Provincial police began to appear, along with district officers and cattle registration and land deeds and registration for **compulsory** military service. Village handicrafts diminished or died out completely as people bought imported consumer goods, like cloth and tools, instead of making them themselves. More economic variation took shape in rural villages, as some grew prosperous from farming while others did not. As well as can be measured, rural standards of living improved in the Fifth Reign. But the statistical averages mean little when measured against the harsh realities of peasant life.

1. The word **“severed”** in the passage is closest in meaning to
  - (A) cut off
  - (B) viewed
  - (C) protected
  - (D) rescued
2. According to paragraph 1, the situation for Siam’s old ruling families changed in all of the following ways EXCEPT
  - (A) Their incomes were reduced.
  - (B) Their sons were posted as district officers in distant provinces.
  - (C) They could sell lands that had traditionally belonged to them.
  - (D) They had less control over the rural populations.
3. According to paragraph 2, which of the following was true of Siam in 1905?
  - (A) Its urban population began to migrate out of the cities and into the country.
  - (B) Its Central Plain was almost as densely populated as it is today.
  - (C) It was so rural that wild elephants and tigers sometimes roamed Bangkok.
  - (D) It had many more villages than it did in the late 1800s.
4. The phrase **“rice-deficient portions”** in the passage is closest in meaning to
  - (A) the parts that consume rice
  - (B) the parts that do not have enough rice
  - (C) the parts where rice is grown
  - (D) the parts that depend primarily on rice
5. Paragraph 3 mentions all of the following as signs of economic growth in Siam EXCEPT
  - (A) An increase in the price of rice
  - (B) An increase in the amount of rice leaving Siam
  - (C) An increase in the nutritional quality of the rice grown
  - (D) An increase in the amount of land used for rice production
6. According to paragraph 3, farming families increased the amount of rice they grew in part by
  - (A) Growing varieties of rice that produced greater yields
  - (B) Forming collective farms by joining together with other farm families
  - (C) Planting rice in areas that had previously remained unplanted
  - (D) Hiring laborers to help them tend their fields
7. According to paragraph 4, what happened after the government ended the practice of requiring rural people to perform labor for it?
  - (A) Rural people became more closely connected to the aristocracy.
  - (B) Rural people spent more time growing rice for profit.
  - (C) The government began to pay the laborers who grew rice for it.
  - (D) The government introduced a special tax on rice.
8. Which of the following best describes the relationship between paragraphs 3 and 4 in the passage?
  - (A) Paragraph 4 provides further evidence of the economic growth of Siam discussed in paragraph 3.
  - (B) Paragraph 4 continues the discussion begun in paragraph 3 of farming improvements that led to economic growth.
  - (C) Paragraph 4 examines a particular effect of the Bowring Treaty mentioned in paragraph 3.
  - (D) Paragraph 4 discusses the second of two factors that contributed to the expansion of rice farming mentioned in paragraph 3.
9. The word **“dispersed”** in the passage is closest in meaning to
  - (A) spread out
  - (B) gained power
  - (C) adapted
  - (D) specialized
10. The word **“compulsory”** in the passage is closest in meaning to
  - (A) foreign
  - (B) formal

- (C) required
- (D) preferred

**11. According to paragraph 5, which of the following was true of Siam's rural people during the Fifth Reign?**

- (A) They were forced to spend most of the profits from rice growing on registrations required by the government.
- (B) Their lives remained very difficult even though statistics suggest that their quality of life improved.
- (C) The non-farmers among them were helped by the government more than the farmers among them were.
- (D) They were more prosperous when they were ruled by local elites than when they were ruled by the more modern government of the Fifth Reign.

**12. According to paragraph 5, the government bureaucracy intruded in village life by**

- (A) Requiring the people to register their cattle and land
- (B) Requiring the people to buy certain kinds of imported goods
- (C) Discouraging the people from making handicrafts and tools
- (D) Encouraging more people to take up farming

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

And yet, how is it that the peasants were able to choose to expand their economic activity in response to the market opportunities?

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

During the late nineteenth century, changes in Siam's power structure had important economic consequences.

**Answer choices**

- (A) Population movement occurred and rice cultivation intensified because Siam became more actively involved in international trade.
- (B) Changes in taxation and the ending of the requirement that people work part-time for the rulers allowed farmers to produce more rice for the marketplace.
- (C) Population increases occurred in part because Siam's farmers were able to produce more rice to feed the population.
- (D) Land became so valuable that villagers had to pay the government for the land that they worked on.
- (E) Although rural living standards may have improved somewhat, prosperity varied from village to village and government bureaucracy played a greater role in village life.
- (F) Government modernization in the early twentieth century resulted in the loss of some freedoms that the rural population had gained from the traditional ruling classes.

**参考答案与解析**

1. 选 **A**。sever, 分离、切开, 对应 cut off。
2. 选 **C**。A 选项对应该段第三句 revenues taken away or restricted; B 选项对应该段第三句 their sons were enticed away to schools for district office later to be posted in some faraway province; C 选项原文中没有提及; D 选项对应该段倒数第二句。
3. 选 **D**。该段第 2、3 句: 1905 年有 3 万人比起 18 世纪晚期有很大的增长。
4. 选 **B**。rice-deficient, 缺乏大米, 对应 do not have enough rice。
5. 选 **C**。A 选项对应 the average price per kilogram doubled; B 选项对应该段第 4 句话; C 选项原文中没有提及; D 选项对应该段的最后一句。
6. 选 **C**。该段的最后一句 plant new land。
7. 选 **B**。该段最后一句: It made good sense to thousands of peasant families to in effect work full-time, grow rice for the marketplace。
8. 选 **D**。第 3 段提到了 2 个因素中的第一个, 出口大米; 第 4 段第一句话表明要讨论第二个因素。
9. 选 **A**。disperse, 散开、驱散, 对应 spread out, 传播、散布。
10. 选 **C**。compulsory, 义务的、强制性的, 对应 required, 必修的、必须的。
11. 选 **B**。该段最后一句: 统计数据不能说明什么, 农民依然活在水深火热之中。
12. 选 **A**。该段第五句。
13. 选 **A**。该段第一句 do so 表示前面必有指代, because 表示原因, 对应了 how。
14. 选 **ABE**。A 选项对应第 3 段核心意思; B 选项对应第 4 段核心意思; C 选项原文中没有明确说明; D 选项原文中没有明确说明; E 选项对应第 5 段核心意思; F 选项对应第 5 段但原文中没有提到 loss of freedoms 的概念。

**笔记区**

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**Distributions of Tropical Bee Colonies**

In 1977 ecologists Stephen Hubbell and Leslie Johnson recorded a dramatic example of how social interactions can produce and enforce regular spacing in a population. They studied competition and nest spacing in populations of stingless bees in tropical dry forests in Costa Rica. Though these bees do no sting, rival colonies of some species fight fiercely over potential nesting sites.

Stingless bees are abundant in tropical and subtropical environments, where they gather nectar and pollen from a wide variety of flowers. They generally nest in trees and live in colonies made up of hundreds to thousands of workers. Hubbell and Johnson observed that some species of stingless bees are highly aggressive to members of their species from other colonies, while other species are not. Aggressive species usually forage in groups and feed mainly on flowers that occur in high-density clumps. Nonaggressive species feed singly or in small groups and on more widely distributed flowers.

Hubbell and Johnson studied several species of stingless bees to determine whether there is a relationship between aggressiveness and patterns of colony distribution. They predicted that the colonies of aggressive species would show regular distributions, while those of nonaggressive species would show random or closely grouped (clumped) distribution. They concentrated their studies on a thirteen-hectare tract of tropical dry forest that contained numerous nests of nine species of stingless bees.

Though Hubbell and Johnson were interested in how bee behavior might affect colony distributions, they recognized that the availability of potential nest sites for colonies could also affect distributions. ■ So as one of the first steps in their study, they mapped the distributions of trees suitable for nesting. ■ They found that potential nest trees were distributed randomly through the study area. ■ They also found that the number of potential nest sites was much greater than the number of bee colonies. ■ What did these measurements show the researchers? **The number of colonies in the study area was not limited by availability of suitable trees, and a clumped or regular distribution of colonies was not due to an underlying clumped or regular distribution of potential nest sites.**

Hubbell and Johnson mapped the nests of five of the nine species of stingless bees accurately, and the nests of four of these species were distributed regularly. All four species with regular nest distributions were highly aggressive to bees from other colonies of their own species. The fifth species was not aggressive, and its nests were randomly distributed over the study area.

The researchers also studied the process by which the aggressive species establish new colonies. Their observations provide insights into the mechanisms that establish and maintain the regular nest distribution of these species. Aggressive species apparently mark prospective nest sites with pheromones, chemical substances secreted by some animals for communication with other members of their species. The pheromone secreted by these stingless bees attracts and aggregates members of their colony to the prospective nest site; however, it also attracts workers from other nests.

If workers from two different colonies arrive at the prospective nest at the same time, they may fight for possession. Fights may be escalated into protracted battles. The researchers observed battles over a nest tree that lasted for two weeks. Each dawn, fifteen to thirty workers from two competing colonies arrived at the contested nest site. The workers from the two colonies faced off in two swarms and displayed and fought with each other. In the displays, pairs of bees faced each other, slowly flew vertically to a height of about three meters, and then grappled each other to the ground. When the two bees hit the ground, they separated, faced off, and performed another aerial display. Bees did not appear to be injured in these fights, which were apparently ritualized. The two swarms abandoned the battle at about 8 or 9 A.M. each morning, only to reform and begin again the next day just after dawn. While this contest over an unoccupied nest site produced no obvious mortality, fights over occupied nests sometimes kill over 1,000 bees in a single battle.

1. The word **“rival”** in the passage is closest in meaning to
  - (A) established
  - (B) competing
  - (C) nearby
  - (D) different
2. According to paragraph 2, some species of stingless bees are aggressive mainly toward
  - (A) Nonaggressive bees that forage on the same flowers
  - (B) Aggressive bees of other species
  - (C) Bees from their own colony
  - (D) Bees of their own species from different colonies
3. According to paragraph 3, Hubbell and Johnson hypothesized that
  - (A) The distribution pattern of bee colonies determines the degree of aggressiveness the bees display.
  - (B) Nests of nonaggressive bees have either a random or a clumped distribution, while nests of aggressive bees have a regular distribution.
  - (C) Nests of nonaggressive bees are generally both closer together and more regularly distributed than those of aggressive bees.
  - (D) Nests of aggressive bees tend to be more regular in shape than those of nonaggressive bees.
4. According to paragraph 4, why did Hubbell and Johnson begin their study by mapping all the potential nest sites?
  - (A) To determine whether the availability of potential nest sites played a role in the distribution of bee colonies
  - (B) To know exactly where in the study area the colonies of all the different bee species were located
  - (C) To be sure that suitable nesting sites were equally available in all parts of the study area
  - (D) To find out whether different species of bees preferred different types of trees as potential nest sites
5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The limited number of colonies was not due to the distribution or availability of potential nesting sites.
  - (B) There was no lack of suitable trees or potential nesting sites in the study area.
  - (C) The number of nests was directly related to the number or the distribution of suitable trees.
  - (D) Neither the number nor the distribution of colonies could be explained by the availability of suitable nest sites.
6. According to paragraph 5, Hubbell and Johnson determined
  - (A) The order in which the colonies in the study area had been established
  - (B) The level of aggressiveness of each of the nine species
  - (C) The distribution pattern of the nests of five of the nine species
  - (D) The number of colonies of each of the nine species
7. Why does the author indicate that **“The fifth species was not aggressive, and its nests were randomly distributed over the study area”**?
  - (A) To identify research results that contradicted Hubbell and Johnson’s original hypothesis
  - (B) To indicate that research results confirmed that nest distribution was related to aggressiveness
  - (C) To introduce the hypothesis that, within the same species, not all colonies are aggressive
  - (D) To point out that both aggressive and nonaggressive species are equally successful at finding nest sites
8. The phrase **“insights into”** in the passage is closest in meaning to
  - (A) tools to study
  - (B) opportunities for
  - (C) evidence of
  - (D) an understanding of
9. According to paragraph 6, what is one result of using pheromones to mark nest sites?
  - (A) The use of pheromones tends to result in nest clumping
  - (B) Pheromones attract animals other than bees to prospective nest sites

- (C) Pheromones tend to make bees aggressive
- (D) Pheromones secreted by bees of one colony also attract bees of other colonies

**10. The word “escalated” in the passage is closest in meaning to**

- (A) intensified
- (B) transformed
- (C) combined
- (D) lengthened

**11. Paragraph 7 supports which of the following ideas about fights over occupied nests?**

- (A) They are more violent than battles over unoccupied nest sites.
- (B) They mostly occur between colonies of different species.
- (C) They are more frequent than battles over unoccupied sites.
- (D) They last longer than battles over unoccupied sites do.

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

For example, a clumped distribution of nests might simply reflect a clumped distribution of suitable nesting sites.

**Where would the sentence best fit?**

**13. Directions: Select from the seven sentences below the three sentences that correctly characterize aggressive species of stingless bees and the two sentences that correctly characterize nonaggressive species. Select each phrase you select in the appropriate column of the table. This question is worth 3 points.**

Aggressive Stingless Bees (THREE):
------------------------------------

Nonaggressive Stingless Bees (TWO):
-------------------------------------

**Answer choices**

- (A) Nests are regularly distributed
- (B) Nests are sometimes located close together
- (C) Nests always occur in large clumps
- (D) Colonies are generally made up of fewer than 100 workers
- (E) Members of a colony feed alone or in small groups
- (F) Bees feed mainly on flowers that grow in high-density clumps
- (G) Nest spacing is maintained by fighting

### 参考答案与解析

1. 选 **B**。rival, 竞争的, 对应 B。
2. 选 **D**。该段第三句: aggressive to members of their species from other colonies。
3. 选 **B**。该段第二句: 他们预测攻击性种群有规则分布然而非攻击性种群展现出随机或成群分布。
4. 选 **A**。该段第一句: 他们意识到潜在的巢穴也会影响分布。
5. 选 **D**。原句表达了 2 个意思: 实际巢穴的数量不受潜在数量的限制、成群还是规则分布也不受潜在巢穴的分布样式的影响。A 选项错在 limited number of colonies, 原句没有提到; B 选项错在于原句意思完全无关; C 选项错在意思与原句相反; D 选项 neither nor 的 2 个否定完全表现出了原句中关系, 正确。
6. 选 **C**。该段第一句前半句: 准确描述了 9 个巢穴中的 5 个巢穴的样式。
7. 选 **B**。4 个巢穴规则样式, 其蜜蜂就有攻击性; 1 个巢穴随机样式, 其蜜蜂就没有表示出攻击性; 即肯定了前文的预测。
8. 选 **D**。insight, 洞察力、领悟, 对应 D。
9. 选 **D**。该段最后一句: 分泌出信息素同样可以吸引其他巢穴的工蜂。
10. 选 **A**。escalate, 升级、上升, 对应 A 选项, intensify, (使) 增强、(使) 加剧。
11. 选 **A**。该段最后一句: 争夺空巢的战斗没有明显的伤亡, 然而争夺已占巢穴会造成尸横遍野。
12. 选 **A**。题干 for example 表明是个例子, 只要将其放在对应的观点句后即可。巢穴的成群分布反应了合适巢穴的成群分布, 对应第一句的观点句, 放在第一个方框。
13. Aggressive 选 **AFG**, Nonaggressive 选 **BE**。A 选项对应第 5 段第 2 句; B 选项对应第 3 段第 2 句和第 5 段第 2 句, 所以 sometimes 正确; C 选项错在 always; D 选项是原文中没有明确说明的信息; E 选项对应第 2 段最后 1 句; F 选项对应第 2 段倒数第 2 句; G 选项对应第 6、7 段。

### 笔记区

建议将生词和陌生的语法条目记在这里, 并时常翻看。

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## The First Civilizations

Evidence suggests that an important stimulus behind the rise of early civilizations was the development of settled agriculture, which unleashed a series of changes in the organization of human communities that **culminated in** the rise of large ancient empires.

The exact time and place that crops were first cultivated successfully is uncertain. Many prehistorians believe that farming may have emerged independently in several different areas of the world when small communities, driven by increasing population and a decline in available food resources, began to plant seeds in the ground in an effort to guarantee their survival. The first farmers, who may have lived as long as 10,000 years ago, undoubtedly used simple techniques and still relied primarily on other forms of food production, such as hunting, foraging, or pastoralism. The real breakthrough took place when farmers began to cultivate crops along the floodplains of river systems. The advantage was that crops grown in such areas were not as dependent on rainfall and therefore produced a more reliable harvest. An additional benefit was that the sediment carried by the river waters deposited nutrients in the soil, thus enabling the farmer to cultivate a single plot of ground for many years without moving to a new location. Thus, the first truly sedentary (that is, nonmigratory) societies were born. As time went on, such communities gradually learned how to direct the flow of water to **enhance** the productive capacity of the land, while the introduction of the iron plow eventually led to the cultivation of heavy soils not previously susceptible to agriculture.

The spread of this river valley agriculture in various parts of Asia and Africa was the decisive factor in the rise of the first civilizations. The increase in food production in these regions led to a significant growth in population, while efforts to control the flow of water to maximize the irrigation of cultivated areas and to protect the local inhabitants from hostile forces outside the community **provoked** the first steps toward cooperative activities on a large scale. The need to oversee the entire process brought about the emergence of an elite that was eventually transformed into a government.

The first clear steps in the rise of the first civilizations took place in the fourth and third millennia B.C. in Mesopotamia, northern Africa, India, and China. How the first governments took shape in these areas is not certain, but anthropologists studying the evolution of human communities in various parts of the world have discovered that one common stage in the process is the emergence of what are called "big men" within a single village or a collection of villages. By means of their military prowess, dominant personalities, or political talents, these people gradually emerge as the leaders of that community. In time, the "big men" become formal symbols of authority and pass on that authority to others within their own family. As the communities continue to grow in size and material wealth, the "big men" assume hereditary status, and their allies and family members are transformed into a hereditary monarchy.

The appearance of these sedentary societies had a major impact on the social organizations, religious beliefs, and way of life of the peoples living within their boundaries. ■ With the increase in population and the development of centralized authority came the emergence of the cities. ■ **While some of these urban centers were identified with a particular economic function, such as proximity to gold or iron deposits or a strategic location on a major trade route, others served primarily as administrative centers or the site of temples for the official cult or other ritual observances.** ■ Within these cities, new forms of livelihood appeared to satisfy the growing need for social services and consumer goods. ■ Some people became artisans or merchants, while others became warriors, scholars, or priests. In some cases, the physical division within the first cities reflected the strict hierarchical character of the society as a whole, with a royal palace surrounded by an imposing wall and separate from the remainder of the urban population. In other instances, such as the Indus River Valley, the cities lacked a royal precinct and the ostentatious palaces that marked their contemporaries elsewhere.

1. The phrase “**culminated in**” in the passage is closest in meaning to
  - (A) reached a high point with
  - (B) logically followed from
  - (C) partly contributed to
  - (D) marked
2. According to paragraph 2, which of the following statements is true of early farmers?
  - (A) They used farming to supplement other food sources.
  - (B) They were driven out of small communities.
  - (C) They were victims of flooding.
  - (D) They farmed several plots of land at once.
3. The word “**undoubtedly**” in the passage is closest in meaning to
  - (A) increasingly
  - (B) certainly
  - (C) in general
  - (D) apparently
4. According to paragraph 2, what are TWO reasons why farmers chose river valleys for cultivation?
  - (A) The soils in river valleys were rich in nutrients.
  - (B) The crops grown in river valleys were not completely dependent on rainwater.
  - (C) Farming techniques could not be easily applied to soils far from rivers.
  - (D) The heavier weight of river soil resulted in more reliable harvests.
5. The word “**enhance**” in the passage is closest in meaning to
  - (A) serve
  - (B) improve
  - (C) control
  - (D) protect
6. The word “**provoked**” in the passage is closest in meaning to
  - (A) secured
  - (B) coordinated
  - (C) modeled
  - (D) brought about
7. According to paragraph 3, which of the following is NOT a reason why governments first arose among agricultural communities?
  - (A) A significant increase in population
  - (B) The desire to control water resources for irrigation
  - (C) The need for protection from outside forces
  - (D) The demand for organized communication with other communities
8. According to paragraph 4, what is not known about the rise of the first civilizations?
  - (A) Where the first steps toward civilization took place
  - (B) Who was allowed to replace “big men” after the “big men” died
  - (C) Why some individuals became recognized as leaders
  - (D) How governments emerged
9. What is the relationship between paragraphs 3 and 4 in the passage?
  - (A) Paragraph 3 explains why a need for leadership arose in early civilizations, and paragraph 4 describes how that leadership developed.
  - (B) Paragraph 3 suggests that agriculture was first practiced in Asia and Africa, and paragraph 4 discusses how it might have later spread to the rest of the world.
  - (C) Paragraph 3 describes several methods of early government, and paragraph 4 gives an extended example of one of them.
  - (D) Paragraph 3 discusses a cause of the spread of river valley agriculture in early civilizations, and paragraph 4 discusses an effect.

**10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) Some cities were associated with economic activities, while others were government or religious centers.
- (B) Emerging cities generally served strategic administrative, economic, and religious purposes.
- (C) The creation of an economic or administrative activity led to the emergence of a city for its proper supervision.
- (D) Some cities emerged as economic centers and later became the sites of administrative or religious activities.

**11. Paragraph 5 suggests that which of the following was a consequence of the emergence of cities?**

- (A) The decentralization of authority
- (B) An increase in religious activity
- (C) The emergence of service- and production-related jobs
- (D) A decreased reliance on mineral resources

**12. According to paragraph 5, why were huge walls built around early royal palaces?**

- (A) To protect the inhabitants from invaders
- (B) To mark the urban areas
- (C) To separate the ruling class from the rest of the population
- (D) To represent the prosperity of a city

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This was accompanied by increased professional specialization.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The practice of settled agriculture in some areas of Asia and Africa was crucial to the development of early civilizations.

**Answer choices**

- (A) Prehistorians disagree as to whether early farmers first cultivated crops along floodplains or first tried cultivating crops in less successful environments.
- (B) Cultivation in fertile river valleys resulted in predictable harvests, which meant that farmers no longer needed to migrate constantly in search of food.
- (C) Because crops could be cultivated more successfully where farmers were not completely dependent on rainfall, hostilities between groups arose over control of the river systems.
- (D) The need to organize the effort to ensure the food supply and defend the land led to the formation of elite supervising groups that eventually became the first governments.
- (E) Increasingly centralized forms of administration resulted in the emergence of social classes and in the development of cities as trade, administration, or religious centers.
- (F) Unlike other early civilizations, those that developed in the Indus River Valley did not have any spectacular palaces or areas for exclusive use by the authorities.

### 参考答案与解析

1. 选 **A**。词汇题：culminate，达到顶点、高潮，对应 A 选项，达到高点。
2. 选 **A**。细节题：定位句 Many prehistorians believe that……意思是当食物来源短缺的时候来种植粮食来维持生计，对应 A 选项，他们用农业来补充其他食物来源。
3. 选 **B**。词汇题：undoubtedly，毫无疑问地，对应 B 选项，理所应当。
4. 选 **AB**。细节题：定位句 The advantage was that……里面提到了 not as dependent on rainfall，不太依赖于降雨，对应 B 选项，不完全依赖降水；同时也提到了 deposited nutrients in the soil，在土壤中沉淀营养，对应 A 选项，土壤营养丰富。
5. 选 **B**。词汇题：enhance，提高、增强，对应 B 选项，提高，改善。
6. 选 **D**。词汇题：provoke，激起、引起、招致、激怒，对应 D 选项，引起。
7. 选 **D**。否定细节题：定位第二句 The increase in food……中的 significant growth in population 对应 A 选项；efforts to control the flow of water 对应 B 选项；protect the local inhabitants from hostile forces outside the community 对应 C 选项，因此 D 选项错误。
8. 选 **D**。否定细节题：定位句 The first clear steps……出现地点 northern Africa, India and China 对应 A 选项；定位句 As the communities continue……提到了世袭制，对应 B 选项；定位句 By means of their……对应 C 选项；定位句 How the first governments……与 D 选项相违背，因此 D 选项错误。
9. 选 **A**。宏观题：第三段主要是说领导者即后来政府形成的原因，第四段主要是讲领导者是如何形成的，对应 A 中 why 和 how。
10. 选 **A**。句子简化题：原句逻辑 while 表示对比转折。句子核心：城市中心的经济功能以及管理中心的仪式功能。A 选项句子对应两个核心，while 的转折对比关系正确，因此 A 选项正确。
11. 选 **C**。推断题：定位句 Within these cities……在这些城市只能给，新的生活形式的出现满足了不断增长的社会服务和消费品的需求。可以推断出有需求就有供给，就会出现与之相关的产业。
12. 选 **C**。细节题：定位句 In some cases……意思是说通过建立高墙来建立严格的等级制度，将统治者和普通老板姓区分开来，对应 C 选项。
13. 选 **D**。句子插入题：This was accompanied by increased professional specialization 中的 professional specialization 职业专门化对应第四个方框之后句子中的 artisans or merchants, warriors, scholars, or priests。
14. 选 **BDE**。A 选项错误，定位第二段，没有出现 disagree, less successful environments 的相关概念；B 选项正确，对应第二段 An additional benefit was that……因为土壤中含有丰富的营养，所以一块地农民可以种很多年，因此就不用迁移到别的地方，最后就定居了；C 选项错误，定位第二，三段，The advantage was that……原句是转折关系，不是因果关系；D 选项正确，对应第三段的核心主旨，政府的形成；E 选项正确，对应第五段核心意思，中央集权导致了社会阶层和不同功能城市的形成；F 选项为细节，定位第五段，In other instances……意思是说 Indus River Valley 这个地方没有华丽的宫殿来代表权力，属于段落细节，可以参照 E 选项正确的原因。

### 笔记区

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**Railroads and Commercial Agriculture in Nineteenth-Century United States**

By 1850 the United States possessed roughly 9,000 miles of railroad track; then years later it had over 30,000 miles, more than the rest of the world combined. Much of the new construction during the 1850s occurred west of the Appalachian Mountains—over 2,000 miles in the states of Ohio and Illinois alone.

The effect of the new railroad lines rippled outward through the economy. Farmers along the tracks began to specialize in crops that they could market in distant locations. With their profits they purchased manufactured goods that earlier they might have made at home. Before the railroad reached Tennessee, the state produced about 25,000 bushels (or 640 tons) of wheat, which sold for less than 50 cents a bushel. Once the railroad came, farmers in the same counties grew 400,000 bushels (over 10,000 tons) and sold their crop at a dollar a bushel.

The new railroad networks shifted the direction of western trade. ■ In 1840 most northwestern grain was shipped south down the Mississippi River to the bustling port of New Orleans. ■ But low water made steamboat travel hazardous in summer, and ice shut down traffic in winter. ■ Products such as lard, tallow, and cheese quickly spoiled if stored in New Orleans' hot and humid warehouses. ■ Increasingly, traffic from the Midwest flowed west to east, over the new rail lines. Chicago became the region's hub, linking the farms of the upper Midwest to New York and other eastern cities by more than 2,000 miles of track in 1855. Thus while the value of goods shipped by river to New Orleans continued to increase, the South's overall share of western trade dropped dramatically.

A sharp rise in demand for grain abroad also encouraged farmers in the Northeast and Midwest to become more commercially oriented. Wheat, which in 1845 commanded \$1.08 a bushel in New York City, fetched \$2.46 in 1855; in similar fashion the price of corn nearly doubled. Farmers responded by specializing in cash crops, borrowing to purchase more land, and investing in equipment to increase productivity.

As railroad lines fanned out from Chicago, farmers began to acquire open prairie land in Illinois and then Iowa, putting the fertile, deep black soil into production. Commercial agriculture transformed this remarkable treeless environment. To settlers accustomed to eastern woodlands, the thousands of square miles of tall grass were an awesome sight. Indian grass, Canada wild rye, and native big bluestem all grew higher than a person. Because eastern plows could not penetrate the densely tangled roots of prairie grass, the earliest settlers erected farms along the boundary separating the forest from the prairie. In 1837, however, John Deere patented a sharp-cutting steel plow that sliced through the sod without soil sticking to the blade. Cyrus McCormick refined a mechanical reaper that harvested fourteen times more wheat with the same amount of labor. By the 1850s McCormick was selling 1,000 reapers a year and could not keep up with demand, while Deere turned out 10,000 plows annually.

The new commercial farming fundamentally altered the Midwestern landscape and the environment. Native Americans had grown corn in the region for years, but never in such large fields as did later settlers who became farmers, whose surpluses were shipped east. Prairie farmers also introduced new crops that were not part of the earlier ecological system, notably wheat, along with fruits and vegetables.

Native grasses were replaced by a small number of plants cultivated as commodities. Corn had the best yields, but it was primarily used to feed livestock. Because bread played a key role in the American and European diet, wheat became the major cash crop. Tame grasses replaced native grasses in pastures for making hay.

Western farmers altered the landscape by reducing the annual fires that had kept the prairie free from trees. In the absence of these fires, trees reappeared on land not in cultivation and, if undisturbed, eventually formed woodlots. The earlier unbroken landscape gave way to independent farms, each fenced off in a precise checkerboard pattern. It was an artificial ecosystem of animals, woodlots, and crops, whose large, uniform layout made western farms more efficient than the more irregular farms in the East.

1. **According to paragraph 1, each of the following is true about railroad track in the United States EXCEPT**
  - (A) In 1850 the United States had less than 10,000 miles of railroad track.
  - (B) By the end of the 1850s, Ohio and Illinois contained more railroad track than any other state in the country.
  - (C) Much of the railroad track built in the United States during the 1850s was located west of the Appalachian Mountain.
  - (D) By 1860 there were more miles of railroad track in the United States than in any other country.
2. **It can be inferred from paragraph 2 that the new railroads had which of the following effects on farm communities?**
  - (A) Most new farms were located along the tracks.
  - (B) Farmers began to grow wheat as a commercial crop.
  - (C) Many farmers decided to grow a wider variety of crops.
  - (D) Demand for manufactured goods increased among farmers.
3. **The word “bustling” in the passage is closest in meaning to**
  - (A) famous
  - (B) important
  - (C) growing
  - (D) busy
4. **According to paragraph 3, in what way did the new rail networks change western trade?**
  - (A) Northwestern farmers almost completely stopped shipping goods by steamboat.
  - (B) Many western goods began to be shipped east by way of Chicago rather than south to New Orleans.
  - (C) Chicago largely replaced New York and other eastern cities as the final market for goods for the West.
  - (D) The value of goods shipped west soon became greater than the value of goods shipped east.
5. **According to paragraph 3, what was a disadvantage of shipping goods from northwestern areas to New Orleans?**
  - (A) There was no reliable way to get goods from New Orleans to eastern cities.
  - (B) The cost of shipping goods by river to New Orleans continued to increase.
  - (C) Goods shipped from New Orleans’ neighboring areas had a significant competitive advantage because of their lower transportation costs.
  - (D) The temperatures and humidity.
6. **Paragraph 4 supports the idea that the price of wheat more than doubled between 1845 and 1855 because**
  - (A) The price of corn nearly doubled during that same period.
  - (B) Demand for grain increased sharply outside the United States.
  - (C) Farmers in the Northeast and Midwest began to specialize in cash crops.
  - (D) Many farmers had borrowed heavily to purchase land and equipment for raising wheat.
7. **The word “transformed” in the passage is closest in meaning to**
  - (A) dominated
  - (B) changed
  - (C) improved
  - (D) created
8. **The word “erected” in the passage is closest in meaning to**
  - (A) looked for
  - (B) lived on
  - (C) preferred
  - (D) built
9. **Why does author point out that “Indian grass, Canada wild rye, and native big bluestem all grew higher than a person”?**
  - (A) To provide a reason why people from the eastern woodlands of the United States were impressed when they saw the prairie.
  - (B) To identify an obstacle to the development of the railroad lines fanning out from Chicago.

- (C) To explain why the transformation of the prairies by commercial agriculture was so remarkable.
- (D) To provide evidence supporting the claim that the prairies had fertile, deep black soil.

**10. According to paragraph 5, the first settlers generally did not farm open prairie land because**

- (A) They could not plow it effectively with the tools that were available
- (B) Prairie land was usually very expensive to buy
- (C) The soil along boundaries between the forest and the prairie was more fertile than the soil of the open prairie
- (D) The railroad lines had not yet reached the open prairie when the first settlers arrived

**11. The word “surpluses” in the passage is closest in meaning to**

- (A) extra goods
- (B) commercial goods
- (C) unprocessed goods
- (D) transportable goods

**12. According to paragraph 8, prairie farmers changed the landscape by doing all of the following EXCEPT**

- (A) Reducing annual fires
- (B) Dividing the land into large, regularly-shaped lots
- (C) Planting trees that eventually formed woodlots
- (D) Fencing off their farms

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

The problems were not limited to routes of transport.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The huge expansion of rail lines in Midwestern United States during the 1850s had major economic and environmental effects.

**Answer choices**

- (A) Construction of new rail lines into the Midwest had been effectively stopped by the Appalachian Mountains, but by 1850 improved construction technology had made further advances possible.
- (B) Rail lines to Chicago and on to the East made it easier to get Midwestern goods to distant markets, while growing demand encouraged crop specialization and led to higher crop prices.
- (C) Because of the growing volume of traffic coming by rail from the Northeast and Midwest, the value of goods arriving in New Orleans for shipment to markets abroad increased dramatically.
- (D) Access to rail lines combined with the development of more-efficient farming equipment allowed the fertile land of the open prairies to be used for large-scale commercial agriculture.
- (E) Reduction of annual prairie fires allowed trees to reappear, and native grasses were replaced by a few commercially grown plants as previously unbroken grasslands were divided into large fenced fields.
- (F) Native Americans had grown corn on the prairies for years but had not produced large surpluses because the varieties they planted had far poorer yields than those introduced by commercial farmers.

### 参考答案与解析

1. 选 **B**。否定细节题：定位句 By 1850……对应 A 选项；定位句 Much of the new construction……对应 C 选项，同时由于该句子中没有出现有关 Ohio and Illinois 比较的相关信息，因此 B 选项错误；定位句 Then years later……对应 D 选项。
2. 选 **D**。推断题：定位句 The effect of the new railroad lines……意思是说因为铁路建设带动了经济，农民开始有钱了，于是就开始买手工制品了，因此就可以推断出，农民有钱了就有了买东西的欲望和需求。
3. 选 **D**。词汇题：bustling，繁忙的、熙熙攘攘的，对应 D 选项，忙碌的。
4. 选 **B**。细节题：定位句 The new railroad networks……意思是铁路的建设转移了西方贸易的方向，芝加哥成为了贸易中心，取代了原先的新奥尔良。因此答案是 B。
5. 选 **B**。细节题：定位句 Thus while the value……意思是说因为虽然货物本身的价值在增加，但是南部的市场份额却在下降，就暗示了越来越少的人愿意通过该途径运货，即要么速度太慢要么成本太高，因此这道题的答案是 B。
6. 选 **B**。细节题：定位句 A sharp rise……国外的粮食需求猛增，然后该段最后出现的结果就是价格上升。
7. 选 **B**。词汇题：transform，变形，对应 B 选项，改变、变化。
8. 选 **D**。词汇题：erect，建立，对应 D 选项，建立、建造。
9. 选 **D**。修辞目的题：定位句 As railroad lines……该段的主旨，农民将肥沃的黑土投入生产中，题干中的信息是一个具体的例子，表明是具体的产物。
10. 选 **A**。细节题：定位句 Because eastern plows……原因是犁不能穿透草地，因此答案只可能是 A。
11. 选 **A**。词汇题：surpluses，剩余、多余的东西，对应 A 选项 extra 额外的、附加的。
12. 选 **C**。否定细节题：定位句 Western farmers altered……对应 A 选项；定位句 The earlier unbroken landscape……对应 D 选项；定位句 It was an artificial ecosystem……棋盘格样式，对应 B 选项；C 选项错在没有提到 planting trees。
13. 选 **C**。句子插入题：原句的意思是问题不仅局限在道路运输上，因此我们可以推断出该句子的下一句应该会提到其他的问题，因此第三个方框满足要求，前面再讲水路问题，后面讲到了天气和湿度问题。插入的句子正好起到了承上启下的作用。
14. 选 **CDE**。A 错，定位第一段，没有提到新的铁路建设是被 Appalachian Mountains 阻断的；B 错，B 选项后半句话正确，是第 4 段的主旨，但是该选项的前半句话是第三段的一个例子，其主旨应该是该段首句；C 正确，对应第三段主要内容，水路交通的没落和铁路运输的兴起繁荣；D 正确，对应第二、五段，铁路的发展带动经济，农民获得土地，改进农作用具，提高农作物的产量；E 正确，对应第八段主旨，农民通过各式各样的方法改变地貌，发展农业；F 错，定位第六段，Native Americans had grown……只是说明了后来的农民种庄稼产量多，再结合该段首句，没有可能和 new commercial farming 有关，但没有提到品种不好。

### 笔记区

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## 自我评价

用时：     分     秒

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## Extinction Episodes of the Past

It was not until the Cambrian period, beginning about 600 million years ago, that a great proliferation of macroscopic species occurred on Earth and produced a fossil record that allows us to track the rise and fall of biodiversity. Since the Cambrian period, biodiversity has generally risen, but there have been some notable exceptions. Biodiversity collapsed dramatically during at least five periods because of mass extinctions around the globe. The five major mass extinctions receive most of the attention, but they are only one end of a spectrum of extinction events. Collectively, more species went extinct during smaller events that were less dramatic but more frequent. The best known of the five major extinction events, the one that saw the demise of the dinosaurs, is the Cretaceous-Tertiary extinction.

Starting about 280 million years ago, reptiles were the dominant large animals in terrestrial environments. In popular language this was the era “when dinosaurs ruled Earth”, when a wide variety of reptile species occupying many ecological niches. **However, no group or species can maintain its dominance indefinitely, and when, after over 200 million years, the age of dinosaurs came to a dramatic end about 65 million years ago, mammals began to flourish, evolving from relatively few types of small terrestrial animals into the myriad of diverse species, including bats and whales, that we know today.** Paleontologists label this point in Earth’s history as the end of the Cretaceous period and the beginning of the Tertiary period, often abbreviated as the K-T boundary. This time was also marked by changes in many other types of organisms. Overall, about 38 percent of the families of marine animals were lost, with percentages much higher in some groups. Ammonoid mollusks went from being very diverse and abundant to being extinct. An extremely abundant set of planktonic marine animals called foraminifera largely disappeared, although they rebounded later. Among plants, the K-T boundary saw a sharp but brief rise in the abundance of primitive vascular plants such as ferns, club mosses, horsetails, and conifers and other gymnosperms. The number of flowering plants (angiosperms) was reduced at this time, but they then began to increase dramatically.

What caused these changes? For many years scientists assumed that a cooling of the climate was responsible, with dinosaurs being particularly vulnerable because, like modern reptiles, they were ectothermic (dependent on environmental heat, or cold-blooded). It is now widely believed that at least some species of dinosaurs had a metabolic rate high enough for them to be endotherms (animals that maintain a relatively consistent body temperature by generating heat internally). Nevertheless, climatic explanations for the K-T extinction are not really challenged by the ideas that dinosaurs may have been endothermic, because even endotherms can be affected by a significant change in the climate.

Explanations for the K-T extinction were revolutionized in 1980 when a group of physical scientists led by Luis Alvarez proposed that 65 million years ago Earth was struck by a 10-kilometer-wide meteorite traveling at 90,000 kilometers per hour. They believed that this impact generated a thick cloud of dust that enveloped Earth, shutting out much of the incoming solar radiation and reducing plant photosynthesis to very low levels. Short-term effects might have included huge tidal waves and extensive fires. In other words, a series of events arising from a single cataclysmic event caused the massive extinctions. ■ Initially, the meteorite theory was based on a single line of evidence. ■ At locations around the globe, geologists had found an unusually high concentration of iridium in the layer of sedimentary rocks that was formed about 65 million years ago. ■ Iridium is an element that is usually uncommon near Earth’s surface, but it is abundant in some meteorites. ■ Therefore, Alvarez and his colleagues concluded that it was likely that the iridium in sedimentary rocks deposited at the K-T boundary had originated in a giant meteorite or asteroid. Most scientists came to accept the meteorite theory after evidence came to light that a circular formation, 180 kilometers in diameter in diameter and centered on the north coast of the Yucatan Peninsula, was created by a meteorite impact about 65 million years ago.

1. The word **“proliferation”** in the passage is closest in meaning to
  - (A) decline
  - (B) extinction
  - (C) increase
  - (D) migration
2. Paragraph 1 supports which of the following statements about life on Earth before the Cambrian period?
  - (A) Biodiversity levels were steady, as indicated by the fossil record.
  - (B) Levels of biodiversity could not be tracked.
  - (C) The most dramatic extinction episode occurred.
  - (D) Few microscopic species existed.
3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The dominance of dinosaurs came to an end 65 million years ago, at which time mammals began to flourish and diversify.
  - (B) Because no group of species can remain dominant forever, mammals became the dominant group when dinosaurs became extinct.
  - (C) After being the dominant group for more than 200 million years, the age of dinosaurs came to a dramatic end 65 million years ago.
  - (D) The diverse group of mammals that we know today, including bats and whales, evolved from small terrestrial forms that had been dominated by dinosaurs.
4. According to paragraph 2, why are dinosaurs popularly said to have “ruled Earth” during the Cretaceous period?
  - (A) Dinosaurs were the only species of reptile that existed during the whole of the Cretaceous period.
  - (B) Dinosaurs won the battle for food resources over mammals during the Cretaceous period.
  - (C) Dinosaurs survived extinction during the Cretaceous period, whereas many other animal species did not.
  - (D) Dinosaurs were the physically and ecologically dominant animals during the Cretaceous period.
5. According to paragraph 2, which of the following species initially increased in number at the K-T boundary?
  - (A) dinosaurs
  - (B) foraminifera
  - (C) ferns
  - (D) ammonoid mollusks
6. Why does the author note that **“even endotherms can be affected by a significant change in the climate”**?
  - (A) To argue that there was a significant climate at the time that endothermic dinosaurs became extinct.
  - (B) To argue that climate change caused some dinosaurs to evolve as endotherms.
  - (C) To support the view that at least some of the dinosaurs that became extinct were endotherms.
  - (D) To defend climate change as possible explanation for the extinction of dinosaurs.
7. The word **“generated”** in the passage is closest in meaning to
  - (A) collected
  - (B) produced
  - (C) spread
  - (D) added
8. The word **“extensive”** in the passage is closest in meaning to
  - (A) widespread
  - (B) sudden
  - (C) numerous
  - (D) subsequent

**9. According to paragraph 4, all of the following contributed to the massive extinctions of the K-T period EXCEPT**

- (A) tidal waves
- (B) fires
- (C) insufficient solar radiation
- (D) iridium

**10. According to paragraph 4, which of the following statements explains the importance of the discovery of high levels of iridium rocks?**

- (A) It provided evidence that overexposure to solar radiation led to the K-T extinction.
- (B) It showed that more than one cataclysmic event was responsible for the K-T extinction.
- (C) It suggested that the cause of the K-T extinction may have been a meteorite striking Earth.
- (D) It provided evidence that the K-T extinction occurred 65 million years ago.

**11. According to paragraph 4, which of the following is true about the Yucatan Peninsula?**

- (A) The circular formation there was caused by a meteorite impact 65 million years ago.
- (B) Sedimentary rocks from that area have the lowest iridium concentration of any rocks on Earth.
- (C) There is evidence that a huge tidal wave occurred there 65 million years ago.
- (D) Evidence found there challenged the meteorite impact theory.

**12. Which of the following can be inferred from paragraph 4 about the meteorite theory?**

- (A) The data originally presented as evidence for the theory were eventually rejected.
- (B) Many scientists did not accept it when it was first proposed.
- (C) It has not been widely accepted as an explanation for the K-T extinction.
- (D) Alvarez subsequently revised it after a circular formation was found in the Yucatan Peninsula.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This focused on the chemical composition of ancient rocks.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

The K-T extinction 65 million years ago is the best known of the five major extinction episodes since the Cambrian period.

**Answer choices**

- (A) Collectively, the five major extinction episodes resulted in the elimination of a larger number of species than did all the minor extinction events.
- (B) The K-T extinction eliminated the dinosaurs and ammonoid mollusks but was followed by the diversification of mammals and gymnospermous plants.
- (C) An extreme cooling of the climate could not have caused the K-T extinction of dinosaurs, because, while most dinosaurs depended on environmental heat, some did not.
- (D) The K-T extinction of the dinosaurs is the only mass extinction that has been explained by the impact of a meteorite.
- (E) In 1980 Luis Alvarez proposed that the K-T extinction was caused by ecological disasters brought about by the impact of a meteorite striking Earth.
- (F) A high concentration of iridium in sedimentary rocks at the K-T boundary and a large impact crater in the Yucatan Peninsula from 65 million years ago strongly support Alvarez' hypothesis.

### 参考答案与解析

1. 选 **C**。词汇题：proliferation，繁殖、激增，对应 C 选项，增加。
2. 选 **B**。推断题：定位句 It was not until……主要意思是直到寒武纪才能够监测生物多样性。言外之意就是在寒武纪之前就不能监测生物多样性，对应 B 选项。
3. 选 **B**。句子简化题：该长句其实是 2 个长句的并列。主要分成两个意思：第一是没有任何一种生物能永远地统治，第二是恐龙灭亡之后，哺乳动物开始发展统治，且 2 层意思之间可以构成因果关系。所以只有 B 选项满足所有条件。
4. 选 **D**。细节题：定位句 Starting about 280 million……对应 D 选项。
5. 选 **D**。细节题：定位句 Paleontologists label this point……题干中的范围限定 initially，因此只可能是 Ammonoid mollusk，选 D。
6. 选 **D**。修辞目的题：题干中的 even 甚至，表示程度的递进。定位句 Nevertheless, climatic explanations……即后半句的原因解释了气候理论为什么不被反驳。
7. 选 **B**。词汇题：generate，产生、引起，对应 B 选项，产生。
8. 选 **A**。词汇题：extensive，广泛的，对应 A 选项，广泛的。
9. 选 **D**。否定细节题：定位句 Short-term effects might……意思是这种冲击产生了大量的厚尘云，遮蔽了天空和阳光，对应 C 选项；而 D 选项，iridium 是有关灭绝的证据，但并非构成灭绝的原因。
10. 选 **C**。细节题：定位句 Initially, the meteorite theory……意思是说小行星撞击理论一开始主要的证据就是在地球的岩石中发现了大量的 iridium（铱），因此其重要性就是说明该撞击理论是物种大灭绝的原因。
11. 选 **A**。细节题：定位句 Most scientists came to accept……意思是说在 Yucatan Peninsula 背岸的大坑是陨石撞击的结果，对应 A 选项。
12. 选 **B**。推断题：定位句 Initially, the meteorite theory……一开始仅依赖于单一证据的理论，暗示了证据还不够充分。定位句 Most scientists came to accept……在环形坑证据出现之后大多数的科学家才开始接受小行星撞击理论，也就是说一开始大多数科学家对该理论是持有怀疑态度的。
13. 选 **B**。句子插入题：给出的句子中出现了 this 的指代提示，表示前面的内容可能与石头的化学组成无关，而该句的下一句应该与化学组成有关。因此只有第二个方框满足条件。在第二个方框之后才出现了对于 iridium 的讨论。
14. 选 **BEF**。A 选项，原文说更多的物种在规模更小但是更频繁的事故中灭绝了，因此 A 选项中的比较信息则不成立，所以 A 选项错误；B 选项，对应第二段段落大意，没有永生的统治者，恐龙之后现在是哺乳动物和植物的天下；C 选项，定位第三段，其主旨是气候变冷可能导致恐龙灭绝，而 C 选项的观点与该主旨背道而驰，所以错误；D 选项，原文并没有提到其他的大灭绝又没有合理的解释，所以 D 选项错误；E 选项，对应第四段主旨，小行星撞击地球假说；F 选项，对应第四段解释小行星撞击地球假说的重要证据。一个证据是 iridium 在地球岩石中的大量出现，另一个证据是巨大环形坑的发现。

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用时： 分 秒

难度：易 / 中 / 难

错误： 个

## Islamic Art and the Book

The arts of the Islamic book, such as calligraphy and decorative drawing, developed during A.D. 900 to 1500, and luxury books are some of the most characteristic examples of Islamic art produced in this period. This came about from two major developments: paper became common, replacing parchment as the major medium for writing, and rounded scripts were regularized and perfected so that they replaced the angular scripts of the previous period, which because of their angularity were uneven in height. Books became major vehicles for artistic expression, and the artists who produced them, notably calligraphers and painters, enjoyed high status, and their workshops were often sponsored by princes and their courts. Before A.D. 900, manuscripts of the Koran (the book containing the teachings of the Islamic religion) seem to have been the most common type of book produced and decorated, but after that date a wide range of books were produced for a broad spectrum of patrons. These continued to include, of course, manuscripts of the Koran, which every Muslim wanted to read, but scientific works, histories, romances, and epic and lyric poetry were also copied in fine handwriting and decorated with beautiful illustrations. Most were made for sale on the open market, and cities boasted special souks (markets) where books were bought and sold. The mosque of Marrakech in Morocco is known as the Kutubiyya, or Booksellers' Mosque, after the adjacent market. Some of the most luxurious books were specific commissions made at the order of a particular prince and signed by the calligrapher and decorator.

Papermaking had been introduced to the Islamic lands from China in the eighth century. ■ It has been said that Chinese papermakers were among the prisoners captured in a battle fought near Samarkand between the Chinese and the Muslims in 751, and the technique of papermaking—in which cellulose pulp extracted from any of several plants is first suspended in water, caught on a fine screen, and then dried into flexible sheets—slowly spread westward. ■ Within fifty years, the government in Baghdad was using paper for documents. ■ Writing in ink on paper, unlike parchment, could not easily be erased, and therefore paper had the advantage that it was difficult to alter what was written on it. ■ **Papermaking spread quickly to Egypt—and eventually to Sicily and Spain—but it was several centuries before paper supplanted parchment for copies of the Koran, probably because of the conservative nature of religious art and its practitioners.** In western Islamic lands, parchment continued to be used for manuscripts of the Koran throughout this period.

The introduction of paper spurred a conceptual revolution whose consequences have barely been explored. Although paper was never as cheap as it has become today, it was far less expensive than parchment, and therefore more people could afford to buy books. Paper is thinner than parchment, so more pages could be enclosed within a single volume. At first, paper was made in relatively small sheets that were pasted together, but by the beginning of the fourteenth century, very large sheets—as much as a meter across—were available. These large sheets meant that calligraphers and artists had more space on which to work. Paintings became more complicated, giving the artist greater opportunities to depict space or emotion. The increased availability of paper, particularly after 1250, encouraged people to develop systems of representation, such as architectural plans and drawings. This in turn allowed the easy transfer of artistic ideas and motifs over great distances from one medium to another, and in a different scale in ways that had been difficult, if not impossible, in the previous period.

Rounded styles of Arabic handwriting had long been used for correspondence and documents alongside the formal angular scripts used for inscriptions and manuscripts of the Koran. Around the year 900, Ibn Muqla, who was a secretary and vizier at the Abbasid court in Baghdad, developed a system of proportioned writing. He standardized the length of alif, the first letter of the Arabic alphabet, and then determined what the size and shape of all other letters should be, based on the alif. Eventually, six round forms of handwriting, composed of three pairs of big and little scripts known collectively as the Six Pens, became the standard repertory of every calligrapher.

1. **Paragraph 1 makes all of the following points about Islamic books EXCEPT**
  - (A) Books were an important form of artistic expression.
  - (B) A wide variety of books with different styles and topics became available.
  - (C) They were sold primarily near mosques.
  - (D) Most books were intended for sale on the open market.
2. **The word “sponsored” in the passage is closest in meaning to**
  - (A) visited
  - (B) owned
  - (C) praised
  - (D) supported
3. **The word “adjacent” in the passage is closest in meaning to**
  - (A) major
  - (B) nearby
  - (C) ancient
  - (D) well-known
4. **According to paragraph 1, before A.D. 900, books in the Islamic world**
  - (A) Included a wide range of subjects
  - (B) Did not contain any calligraphy or decoration
  - (C) Used rounded scripts
  - (D) Were usually written on parchment
5. **In paragraph 1, why does the author mention the fact that the mosque in Marrakech, Morocco, is known as the Booksellers’ Mosque?**
  - (A) To cast doubt on the importance of souks in making books available to common people.
  - (B) To provide an example of a place where books were made at the order of a particular prince.
  - (C) To emphasize how influential and well known the book markets were.
  - (D) To demonstrate the need for religious texts in Islamic lands.
6. **The phrase “extracted from” in the passage is closest in meaning to**
  - (A) taken out of
  - (B) produced using
  - (C) discovered in
  - (D) combined with
7. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) It was several centuries before papermaking techniques spread to faraway areas where parchment was popular and used widely in art.
  - (B) Although papermaking came to Egypt quickly, it took much longer for paper to be used when copying the Koran, probably because of the conservative nature of religious art.
  - (C) Papermaking spread beyond Egypt, Sicily, and Spain, but it was not widely used by artists for centuries, probably because of the conservative nature of art in those countries.
  - (D) Paper replaced parchment in copies of the Koran, probably at the request of conservative practitioners in areas like Egypt, Sicily, and Spain.
8. **In paragraphs 2 and 3, which of the following is NOT mentioned as an advantage of paper over parchment?**
  - (A) It was harder to erase or change what was written on paper.
  - (B) More pages of paper could be bound in a single volume.
  - (C) Paper could be produced in sheets of varying weights and thicknesses.
  - (D) More people could buy books made of paper because it was cheaper.
9. **Why does the author include the following information: “At first, paper was made in relatively small sheets that were pasted together, but by the beginning of the fourteenth century, very large sheets—as much as a meter across—were available.”?**
  - (A) To provide evidence that the development of papermaking techniques was very slow.

- (B) To explain why paper was never as cheap as it has become today.
- (C) To make the point that paper allowed artists to develop paintings that were more expressive and complex.
- (D) To prove that paper was more popular with artists who used large sheets, than it was with book printers, who used smaller sheets.

**10. According to paragraph 3, the increased availability of paper and the development of systems of representation**

- (A) Encourage more people to make their own drawings
- (B) Made the transfer of artistic ideas to distant people and places much easier
- (C) Made architectural plans more complex and therefore harder to read
- (D) Allowed artists to create paintings that were smaller in scale

**11. According to paragraph 4, what did Ibn Muqla achieve around the year 900?**

- (A) He modified a set of formal scripts known as the Six Pens into rounded scripts appropriate for correspondence.
- (B) He created a standardized set of rounded scripts proportional to the size of the first letter of the alphabet.
- (C) He promoted calligraphy as an art form and encouraged the use of rounded letters in religious texts.
- (D) He persuaded the court in Baghdad to use rounded styles instead of more angular scripts in their documents.

**12. The phrase “composed of” in the passage is closest in meaning to**

- (A) made up of
- (B) developed from
- (C) in addition to
- (D) similar to

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This change occurred for good reason.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Islamic books from A.D. 900 to 1500 reflect major changes from the past and important innovations.

**Answer choices**

- (A) Books became major vehicle of artistic expression for calligraphers and painters, and the subjects of books expanded to include more and more kinds of works.
- (B) The growing luxuriousness of books meant that the market for them was increasingly dominated by the wealthy and powerful patrons who could afford them.
- (C) After it was learned from Chinese prisoners, the technique of papermaking spread throughout Islamic lands, where paper gradually replaced parchment.
- (D) The high status enjoyed by calligraphers and artists made books extremely popular in the cities where books were bought and sold.
- (E) The popularity of books led to major advances in the development and transfer of new artistic ideas.
- (F) Around the year 900, a set of rounded styles of Arabic handwriting began replacing angular scripts in copying the manuscripts of the Koran.

### 参考答案与解析

1. 选 **C**。目前暂无解析。
2. 选 **D**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **D**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **A**。目前暂无解析。
7. 选 **B**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **C**。目前暂无解析。
10. 选 **B**。目前暂无解析。
11. 选 **B**。目前暂无解析。
12. 选 **A**。目前暂无解析。
13. 选 **C**。目前暂无解析。
14. 选 **ACE**。目前暂无解析。

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错误：      个

## Protection of Plants by Insects

Many plants—one or more species of at least 68 different families—can secrete nectar even when they have no blossoms, because they bear extrafloral nectaries (structures that produce nectar) on stems, leaves, leaf stems, or other structures. These plants usually occur where ants are abundant, most in the tropics but some in temperate areas. Among those of northeastern North America are various plums, cherries, roses, hawthorns, poplars, and oaks. Like floral nectar, extrafloral nectar consists mainly of water with a high content of dissolved sugars and, in some plants, small amounts of amino acids. The extrafloral nectaries of some plants are known to attract ants and other insects, but the evolutionary history of most plants with these nectaries is unknown. Nevertheless, most ecologists believe that all extrafloral nectaries attract insects that will defend the plant.

Ants are portably the most frequent and certainly the most **persistent** defenders of plants. ■ Since the highly active worker ants require a great deal of energy, plants exploit this need by providing extrafloral nectar that supplies ants with abundant energy. ■ To return this favor, ants guard the nectaries, driving away or killing intruding insects that might compete with ants for nectar. ■ Many of these intruders are herbivorous and would eat the leaves of the plants. ■

Biologists once thought that secretion of extrafloral nectar has some purely internal physiological function, and that ants provide no benefit whatsoever to the plants that secrete it. This view and the opposing “protectionist” hypothesis that ants defend plants had been disputed for over a hundred years when, in 1910, a **skeptical** William Morton Wheeler commented on the controversy. He called for proof of the protectionist view: that visitations of the ants confer protection on the plants and that in the absence of the insects a much greater number would perish or fail to produce flowers or seeds than when the insects are present. **That we now have an abundance of the proof that was called for was established when Barbara Bentley reviewed the relevant evidence in 1977, and since then many more observations and experiments have provided still further proof that ants benefit plants.**

One example shows how ants attracted to extrafloral nectaries protect morning glories against attacking insects. The principal insect enemies of the North American morning glory feed mainly on its flowers or fruits rather than its leaves. Grasshoppers feeding on flowers indirectly block pollination and the production of seeds by destroying the corolla or the stigma, which receives the pollen grains and on which the pollen germinates. Without their colorful corolla, flowers do not attract pollinators and are not fertilized. An adult grasshopper can consume a large corolla, about 2.5 inches long, in an hour. Caterpillars and seed beetles affect seed production directly. Caterpillars **devour** the ovaries, where the seeds are produced, and seed beetle larvae eat seeds as they burrow in developing fruits.

Extrafloral nectaries at the base of each sepal attract several kinds of insects, but 96 percent of them are ants, several different species of them. When buds are still small, less than a quarter of an inch long, the sepal nectaries are already present and producing nectar. They continue to do so as the flower develops and while the fruit matures. Observations leave little doubt that ants protect morning glory flowers and fruits from the combined enemy force of grasshoppers, caterpillars, and seed beetles. Bentley compares the seed production of six plants that grew where there were no ants with that of seventeen plants that were occupied by ants. Unprotected plants bore only 45 seeds per plant, but plants occupied by ants bore 211 seeds per plant. Although ants are not big enough to kill or seriously injure grasshoppers, they drive them away by nipping at their feet. Seed beetles are more **vulnerable** because they are much smaller than grasshoppers. The ants prey on the adult beetles, disturb females as they lay their eggs on developing fruits, and eat many of the eggs they do manage to lay.

1. **According to paragraph 1, floral nectar and extrafloral nectar are alike in that**
  - (A) They are likely to be produced by the same plants
  - (B) They basically consist of the same chemical components
  - (C) They attract only insects that will defend the plant
  - (D) They are produced by the same parts of the plant
2. **To say that ants are “persistent” defenders of plants means that**
  - (A) They defend plants against a wide variety of threats
  - (B) They continue to defend plants for as long as the plants are threatened
  - (C) They are successful defenders of plants
  - (D) They are easily observable defenders of plants
3. **What can be inferred from paragraph 2 about the ants that are attracted to the extrafloral nectaries?**
  - (A) They do not eat the leaves of the plants that produce extrafloral nectar.
  - (B) They live almost entirely on extrafloral nectar.
  - (C) They spend most of their energy guarding extrafloral nectaries.
  - (D) They frequently fight among themselves over extrafloral nectar.
4. **According to paragraph 3, what was the position of the opponents of the “protectionist” hypothesis?**
  - (A) Extrafloral nectar provides plants with a direct defense against attack by insects.
  - (B) Ants substantially benefit plants that secrete extrafloral nectar.
  - (C) The secretion of extrafloral nectar plays a role in the plant’s internal functioning.
  - (D) Ants visit plants that secrete extrafloral nectar as often as they visit plants that do not.
5. **The word “skeptical” in the passage is closest in meaning to**
  - (A) curious
  - (B) doubtful
  - (C) open-minded
  - (D) practical
6. **Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) We now have ample proof that ants benefit plants.
  - (B) Barbara Bentley has called for additional proof that ants benefit plants.
  - (C) In 1977 Barbara Bentley conducted research that proved that all prior studies were wrong.
  - (D) Proof that ants benefit plants will require many more observations and experiments.
7. **According to paragraph 4, what effect does the destruction of the corolla have on plants?**
  - (A) It leaves the seeds exposed and unprotected.
  - (B) It prevents the stigma from developing.
  - (C) It keeps pollen grains from attaching properly.
  - (D) It prevents the flower from attracting pollinators.
8. **The word “devour” in the passage is closest in meaning to**
  - (A) attack
  - (B) eat
  - (C) damage
  - (D) prefer
9. **What role does paragraph 5 play in the passage?**
  - (A) It offers various kinds of evidence for the protectionist view.
  - (B) It presents the study that first proved that ants benefit plants.
  - (C) It explains how insects find sources of nectar.
  - (D) It presents information that partly contradicts the protectionist view.
10. **The word “vulnerable” in the passage is closest in meaning to**
  - (A) numerous
  - (B) harmful

- (C) open to attack
- (D) difficult to locate

**11. According to paragraph 5, what did Bentley's comparative study show?**

- (A) Many more plants grew in places where ants were present than where they were absent.
- (B) The ants preferred plants with low seed production to plants with high seed production.
- (C) The plants occupied by ants produced many more seeds than those that were not occupied by ants.
- (D) The plants that grew in places without ants were much smaller and weaker than those that grew in places where ants were present.

**12. According to paragraph 5, ants defend morning glory plants from seed beetles in each of the following ways EXCEPT**

- (A) Driving adult beetles off the plants by nipping at their feet
- (B) Catching and eating adult beetles
- (C) Eating beetle eggs they find on developing fruits
- (D) Making it difficult for beetles to lay eggs on developing fruits

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Sometimes they capture the insects to feed their protein-hungry larvae.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Many plants have extrafloral nectaries that produce nectar even during periods in which the plant is not flowering.

**Answer choices**

- (A) Evolutionary history shows that plants that produce extrafloral nectar originated in the tropics.
- (B) Extrafloral nectar has a higher concentration of sugar than floral nectar and is more attractive to ants and other insects.
- (C) The protectionist hypothesis is that extrafloral nectar attracts ants, and that the ants, in order to preserve this energy-rich food source, attack insects that might harm the plant.
- (D) Evidence accumulated during the twentieth century proved that ants provide significant benefits for plants with extrafloral nectaries.
- (E) Research has shown that American morning glory plants that are protected by ants produce significantly more seeds than morning glory plants that are not protected by ants.
- (F) Ants generally ignore small insects, but they will eat the adults of large insect species as well as their eggs and larvae.

### 参考答案与解析

1. 选 **B**。目前暂无解析。
2. 选 **B**。目前暂无解析。
3. 选 **A**。目前暂无解析。
4. 选 **C**。目前暂无解析。
5. 选 **B**。目前暂无解析。
6. 选 **A**。目前暂无解析。
7. 选 **D**。目前暂无解析。
8. 选 **B**。目前暂无解析。
9. 选 **A**。目前暂无解析。
10. 选 **C**。目前暂无解析。
11. 选 **C**。目前暂无解析。
12. 选 **A**。目前暂无解析。
13. 选 **C**。目前暂无解析。
14. 选 **CDE**。目前暂无解析。

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**The Development of Steam Power**

By the eighteenth century, Britain was experiencing a severe shortage of energy. ■ Because of the growth of population, most of the great forests of medieval Britain had long ago been replaced by fields of grain and hay. ■ Wood was in ever-shorter supply, yet it remained tremendously important. ■ It served as the primary source of heat for all homes and industries and as a basic raw material. ■ Processed wood (charcoal) was the fuel that was mixed with iron ore in the blast furnace to produce pig iron (raw iron). The iron industry's appetite for wood was enormous, and by 1740 the British iron industry was stagnating. Vast forests enabled Russia to become the world's leading producer of iron, much of which was exported to Britain. But Russia's potential for growth was limited too, and in a few decades Russia would reach the barrier of inadequate energy that was already holding England back.

As this early energy crisis grew worse, Britain looked toward its abundant and widely scattered reserves of coal as an alternative to its vanishing wood. Coal was first used in Britain in the late Middle Ages as a source of heat. By 1640 most homes in London were heated with it, and it also provided heat for making beer, glass, soap, and other products. Coal was not used, however, to produce mechanical energy or to power machinery. It was there that coal's potential was enormous.

As more coal was produced, mines were dug deeper and deeper and were constantly filling with water. Mechanical pumps, usually powered by hundreds of horses waling in circles at the surface, had to be installed. Such power was expensive and bothersome. In an attempt to overcome these disadvantages, Thomas Savery in 1698 and Thomas Newcomen in 1705 invented the first primitive steam engines. Both engines were extremely inefficient. Both burned coal to produce steam, which was then used to operate a pump. However, by the early 1770s, many of the Savery engines and hundreds of the Newcomen engines were operating successfully, though inefficiently, in English and Scottish mines.

In the early 1760s, a gifted young Scot named James Watt was drawn to a critical study of the steam engine. Watt was employed at the time by the University of Glasgow as a skilled crafts worker making scientific instruments. In 1763, Watt was called on to repair a Newcomen engine being used in a physics course. After a series of observations, Watt saw that the Newcomen's waste of energy could be reduced by adding a separate condenser. This splendid invention, patented in 1769, greatly increased the efficiency of the steam engine. The steam engine of Watt and his followers was the technological advance that gave people, at least for a while, unlimited power and allowed the invention and use of all kinds of power equipment.

The steam engine was quickly put to use in several industries in Britain. It drained mines and made possible the production of ever more coal to feed steam engines elsewhere. The steam power plant began to replace waterpower in the cotton-spinning mills as well as other industries during the 1780s, contributing to a phenomenal rise in industrialization. The British iron industry was radically transformed. The use of powerful, steam-driven bellows in blast furnaces helped iron makers switch over rapidly from limited charcoal to unlimited coke (which is made from coal) in the smelting of pig iron (the process of refining impure iron) after 1770 in the 1780s, Henry Cort developed the puddling furnace, which allowed pig iron to be refined in turn with coke. Cort also developed heavy-duty, steam-powered rolling mills, which were capable of producing finished iron in every shape and form.

The economic consequence of these technical innovations in steam power was a great boom in the British iron industry. In 1740 annual British iron production was only 17,000 tons, but by 1844, with the spread of coke smelting and the impact of Cort's inventions, it had increased to 3,000,000 tons. This was a truly amazing expansion. Once scarce and expensive, iron became cheap, basic, and indispensable to the economy.

1. **What can be inferred from paragraph 1 about Britain's short supply of wood in the eighteenth century?**
  - (A) Wood from Britain's great forests was being exported to other countries for profit.
  - (B) A growing population had required cutting down forests to increase available land for farming.
  - (C) Larger families required the construction of larger homes made from wood.
  - (D) What was left of the great forests after the medieval period was being strictly protected.
2. **Select TWO answer choices that, according to paragraph 1, are true statements about Russia's iron industry in the eighteenth century.**
  - (A) Russia reached its maximum production of iron at the same time as Britain.
  - (B) Russia exported much of its iron production to Britain.
  - (C) Russia's appetite for iron increased rapidly after 1740.
  - (D) Russia's energy resources eventually became insufficient and limited the growth of its iron industry.
3. **The word "abundant" in the passage is closest in meaning to**
  - (A) reliable
  - (B) plentiful
  - (C) well-preserved
  - (D) existing
4. **Why are "beer, glass, soap, and other products" mentioned in the discussion of Britain's energy?**
  - (A) To help explain why the energy crisis was so severe.
  - (B) To show that despite the energy crisis and as early as 1640, London homes were advanced and well supplied.
  - (C) To emphasize that after 1640, British homes required energy for more than heat.
  - (D) To indicate that coal had been used for the production of certain products before the eighteenth century.
5. **According to paragraph 3, all of the following are ways in which the Savery and Newcomen engines were similar EXCEPT**
  - (A) Both became relatively inexpensive after the 1770s.
  - (B) Both produced steam by burning coal.
  - (C) Both were used to operate pumps.
  - (D) Both were very inefficient.
6. **The word "gifted" in the passage is closest in meaning to**
  - (A) independent
  - (B) talented
  - (C) famous
  - (D) ambitious
7. **According to paragraph 4, what was James Watt's major achievement?**
  - (A) He was able to apply his understanding of physics to invent a variety of scientific instruments and tools for skilled crafts workers.
  - (B) He taught university physics courses to outstanding students whose observations led to many patented inventions.
  - (C) He improved the efficiency of Newcomen's engine by preventing energy from being lost.
  - (D) He redesigned Newcomen's engine so that it no longer needed a separate condenser.
8. **The word "splendid" in the passage is closest in meaning to**
  - (A) original
  - (B) necessary
  - (C) magnificent
  - (D) popular
9. **Which of the following is NOT mentioned in paragraph 5 as a development that greatly changed the production of iron?**
  - (A) The use of coke in the smelting of pig iron.
  - (B) The invention of a furnace that used coke to refine iron.
  - (C) The discovery of a method for increasing the production of charcoal.

(D) The invention of powerful machinery that could shape, form, and finish iron.

**10. In paragraph 6, why does the author compare British iron production in 1740 with that of 1844?**

- (A) To contrast the amounts of iron needed in Britain in two different centuries.
- (B) To illustrate how easy it was to make money using Cort's invention.
- (C) To demonstrate the tremendous growth of the iron industry in Britain.
- (D) To demonstrate how inexpensive coal had become.

**11. The word "indispensable" in the passage is closest in meaning to**

- (A) advantageous
- (B) essential
- (C) less costly
- (D) highly stimulating

**12. According to the passage, which of the following is true about the development of steam power?**

- (A) The steam engine's basic technology can be traced back to medieval Britain when steam-powered machinery was being tried in farming activities.
- (B) Although Russia and Britain developed steam-power technology simultaneously, Britain was first to try it in a large-scale industry due to a greater need for iron.
- (C) Steam-power technology was largely the result of improvements developed to increase the supply of coal as a primary source of energy.
- (D) Adaptations to steam engines required for their use in cotton-spinning mills led to radical developments in machinery used in the iron industry.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Energy had not been a problem for Britain in the past because it relied on a rich source of energy: its vast forests.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

By the eighteenth century, Britain was experiencing a severe shortage of energy.

**Answer choices**

- (A) The development of blast furnaces for the manufacture of pig iron made the Britain less dependent on wood.
- (B) After the medieval period, both Russia and Britain began to look for alternative sources of energy, such as steam power, in order to maintain the growth of their iron industries.
- (C) Two inventors designed the first steam engines in order to overcome the disadvantages of relying on horses to power the pumps used in mining coal.
- (D) James Watt was able to improve upon the efficiency of the steam engine and make it useful to several industries.
- (E) The puddling furnace increased the availability of charcoal to a variety of industries from cotton to iron production.
- (F) Steam power increased coal production, which in turn allowed extraordinary growth of the iron industry and the British economy.

### 参考答案与解析

1. 选 **B**。目前暂无解析。
2. 选 **BD**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **D**。目前暂无解析。
5. 选 **A**。目前暂无解析。
6. 选 **B**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **C**。目前暂无解析。
10. 选 **C**。目前暂无解析。
11. 选 **B**。目前暂无解析。
12. 选 **C**。目前暂无解析。
13. 选 **A**。目前暂无解析。
14. 选 **CDF**。目前暂无解析。

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## Europe in the Twelfth Century

Europe in the eleventh century underwent enormous social, technological, and economic changes, but this did not create a new Europe—it created two new ones. ■ The north was developed as a rigidly hierarchical society in which status was determined, or was at least indicated, by the extent to which one owned, controlled, or labored on land; whereas the Mediterranean south developed a more fluid, and therefore more chaotic, world in which industry and commerce predominated and social status both reflected and resulted from the role that one played in the public life of the community. ■ In other words, individual identity and social community in the north were established on a personal basis, whereas in the south they were established on a civic basis. ■ By the start of the twelfth century, northern and southern Europe were very different places indeed, and the Europeans themselves noticed it and commented on it. ■

Political dominance belonged to the north. Germany, France, and England had large populations and large armies that made them, in the political and military senses, the masters of Western Europe. Organized by the practices known collectively as feudalism, these kingdoms emerged as powerful states with sophisticated machineries of government. Their kings and queens were the leading figures of the age; their castles and cathedrals stood majestically on the landscape as symbols of their might; their armies both energized and defined the age. Moreover, feudal society showed a remarkable ability to adapt to new needs by encouraging the parallel development of domestic urban life and commercial networks; in some regions of the north, in fact, feudal society may even have developed in response to the start of the trends toward bigger cities. But southern Europe took the lead in economic and cultural life. Though the leading Mediterranean states were small in size, they were considerably wealthier than their northern counterparts. The Italian city of Palermo in the twelfth century, for example, alone generated four times the commercial tax revenue of the entire kingdom of England. Southern communities also possessed urbane, multilingual cultures that made them the intellectual and artistic leaders of the age. Levels of general literacy in the south far surpassed those of the north, and the people of the south put that learning to use on a large scale. Science, mathematics, poetry, law, historical writing, religious speculation, translation, and classical studies all began to flourish; throughout most of the twelfth century, most of the continent's best brains flocked to southern Europe.

So too did a lot of the North's soldiers. **One of the central themes of the political history of the twelfth century was the continual effort by the northern kingdoms to extend their control southward in the hope of tapping into the Mediterranean bonanza.** The German emperors starting with Otto I (936–973), for example, struggled ceaselessly to establish their control over the cities of northern Italy, since those cities generated more revenue than all of rural Germany combined. The kings of France used every means at their disposal to push the lower border of their kingdom to the Mediterranean shoreline. And the Normans who conquered and ruled England established outposts of Norman power in Sicily and the adjacent lands of southern Italy; the English kings also hoped or claimed at various times to be, either through money or marriage diplomacy, the rulers of several Mediterranean states. But as the northern world pressed southward, so too did some of the cultural norms and social mechanisms of the south expand northward. Over the course of the twelfth century, the feudal kingdoms witnessed a proliferation of cities modeled in large degree on those of the south. Contact with the merchants and financiers of the Mediterranean led to the development of northern industry and international trade (which helped to pay for many of the castles and cathedrals mentioned earlier). And education spread as well, culminating in the foundation of what is arguably medieval Europe's greatest invention: the university. The relationship of north and south was symbiotic, in other words, and the contrast between them was more one of differences in degree than of polar opposition.

1. The word “**rigidly**” in the passage is closest in meaning to
  - (A) extremely
  - (B) normally
  - (C) obviously
  - (D) strictly
2. According to paragraph 1, which of the following was a deciding factor in person’s place in society in northern Europe at the end of the eleventh century?
  - (A) Ownership of a commercial enterprise
  - (B) Participation in social and technological changes
  - (C) Role in public life in the community
  - (D) Relationship to land through ownership or labor
3. According to paragraph 1, which of the following best characterizes the societies in European lands close to the Mediterranean Sea at the beginning of the eleventh century?
  - (A) They were civic societies dominated by industry and commerce.
  - (B) They were based on individual social status.
  - (C) They had a fixed and hierarchical form of government.
  - (D) They were established on the idea of individual responsibility.
4. The word “**counterparts**” in the passage is closest in meaning to
  - (A) associates
  - (B) equivalents
  - (C) opponents
  - (D) admirers
5. Why does the author mention the “**Italian city of Palermo**” in the passage?
  - (A) It had a population that spoke several different languages.
  - (B) Its artists and intellectuals were famous both in the north and south.
  - (C) Its commerce made it richer than a large northern country.
  - (D) It was a relatively small and unimportant Mediterranean state.
6. The word “**urbane**” in the passage is closest in meaning to
  - (A) cultivated
  - (B) famous
  - (C) popular
  - (D) exceptional
7. According to paragraph 2, European intellectuals moved to southern Europe during the twelfth century because southern cities
  - (A) needed learned people for commerce
  - (B) paid educated people better than northern cities did
  - (C) were flourishing centers of science, literature, and other studies
  - (D) needed teachers to improve the levels of general learning
8. Which of the following best describes the organization of paragraph 2?
  - (A) A statement of fact followed by examples
  - (B) A description followed by a contrasting description
  - (C) A series of detailed comparisons
  - (D) A logical argument
9. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) In political history, northern kingdoms tried to extend their control during the twelfth century, but the south tapped into the rich treasures it had around the Mediterranean.
  - (B) Political history demonstrates that during the twelfth century, while southern states enjoyed the Mediterranean bonanza, northern countries increased the power of their kings.
  - (C) The political history of twelfth-century Europe shows particularly that northern countries continually tried to expand their rule into the south to profit from the riches there.

- (D) Political history shows that northern kingdoms were so influenced by the example of Mediterranean wealth that they advanced into other areas.

**10. The word “proliferation” in the passage is closest in meaning to**

- (A) beginning
- (B) increase
- (C) occupation
- (D) construction

**11. According to paragraph 3, northern Europe was influenced by the Mediterranean states in all of the following ways EXCEPT**

- (A) the design of castles and cathedrals
- (B) the spread of education
- (C) the construction of cities
- (D) the development of industry and trade

**12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

There was northern Europe on the one hand and southern Europe on the other.

**Where would the sentence best fit?**

**13. Directions: Select from the seven phrases below the two phrases that correctly characterize northern Europe during the twelfth century and the three phrases that correctly characterize southern Europe. Two of the phrases will NOT be used. Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.**

Southern Europe (THREE):

North Europe (TWO):

**Answer choices**

- (A) Democratic social structure
- (B) Sophisticated culture
- (C) Small wealthy states
- (D) Famous kings and queens
- (E) Extensive communication systems
- (F) Highly literate population
- (G) Large military forces

### 参考答案与解析

1. 选 **D**。目前暂无解析。
2. 选 **D**。目前暂无解析。
3. 选 **A**。目前暂无解析。
4. 选 **B**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **A**。目前暂无解析。
7. 选 **C**。目前暂无解析。
8. 选 **B**。目前暂无解析。
9. 选 **C**。目前暂无解析。
10. 选 **B**。目前暂无解析。
11. 选 **A**。目前暂无解析。
12. 选 **A**。目前暂无解析。
13. Southern Europe 选 **BDG** , North Europe 选 **CF**。目前暂无解析。

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**Population and Climate**

*Para 1* The human population on Earth has grown to the point that it is having an effect on Earth's atmosphere and ecosystems. Burning of fossil fuels, deforestation, urbanization, cultivation of rice and cattle, and the manufacture of chlorofluorocarbons (CFCs) for propellants and refrigerants are increasing the concentration of carbon dioxide, methane, nitrogen oxides, sulphur oxides, dust, and CFCs in the atmosphere. About 70 percent of the Sun's energy passes through the atmosphere and strikes Earth's surface. This radiation heats the surface of the land and ocean, and these surfaces then reradiate infrared radiation back into space. This allows Earth to avoid heating up too much. However, not all of the infrared radiation makes it into space; some is absorbed by gases in the atmosphere and is reradiated back to Earth's surface. A greenhouse gas is one that absorbs infrared radiation and then reradiates some of this radiation back to Earth. Carbon dioxide, CFCs, methane, and nitrogen oxides are greenhouse gases. The natural greenhouse effect of our atmosphere is well established. In fact, without greenhouse gases in the atmosphere, scientists calculate that Earth would be about 33°C cooler than it currently is.

*Para 2* The current concentration of carbon dioxide in the atmosphere is about 360 parts per million. **Human activities are having a major influence on atmospheric carbon dioxide concentrations, which are rising so fast that current predictions are that atmospheric concentrations of carbon dioxide will double in the next 50 to 100 years.** The Intergovernmental Panel on Climate Change (IPCC) report in 1992, which represents a consensus of most atmospheric scientists, predicts that a doubling of carbon dioxide concentration would raise global temperatures anywhere between 1.4°C and 4.5°C. The IPCC report issued in 2001 raised the temperature prediction almost twofold. The suggested rise in temperature is greater than the changes that occurred in the past between ice ages. The increase in temperatures would not be uniform, with the smallest changes at the equator and changes two or three times as great at the poles. The local effects of these global changes are difficult to predict, but it is generally agreed that they may include alterations in ocean currents, increased winter flooding in some areas of the Northern Hemisphere, a higher incidence of summer.

*Para 3* Scientists are actively investigating the feedback mechanism within the physical, chemical, and biological components of Earth's climate system in order to make accurate predictions of the effects the rise in greenhouse gases will have on future global climates. Global circulation models are important tools in this process. These models incorporate current knowledge on atmospheric circulation patterns, ocean currents, the effect of landmasses, and the like to predict climate under changed conditions. There are several models, and all show agreement on a global scale. For example, all models show substantial changes in climate when carbon dioxide concentration is doubled. However, there are significant differences in the regional climates predicted by different models. Most models project greater temperature increases in mid-latitude regions and in mid-continental regions relative to the global average. Additionally, changes in precipitation patterns are predicted, with decreases in mid-latitude regions and increased rainfall in some tropical areas. Finally, most models predict that there will be increased occurrences of extreme events, such as extended periods without rain (drought), extreme heat waves, greater seasonal variation in temperatures, and increases in the frequency and magnitude of severe storms. Plants and animals have strong responses to virtually every aspect of these projected global changes.

*Para 4* The challenge of predicting organismal responses to global climate change is difficult. ■ Partly, this is due to the fact that there are more studies of short-term, individual organism responses than there are of long-term, systemwide studies. ■ It is extremely difficult, both monetarily and physically, for scientists to conduct field studies at spatial and temporal scales that are large enough to include all the components of real-world systems, especially ecosystems with large, freely ranging organisms. ■ One way paleobiologists try to get around this limitation is to attempt to reconstruct past climates by examining fossil life. ■

*Para 5* The relative roles that abiotic and biotic factors play in the distribution of organisms is especially important now, when the world is confronted with the consequences of a growing human population. Changes in climate, land use, and habitat destruction are currently causing dramatic decreases in biodiversity throughout the world. An understanding of climate-organism relationships is essential to efforts to preserve and manage Earth's biodiversity.

1. The phrase “makes it” in the passage is closest in meaning to
  - (A) is reflected
  - (B) collects
  - (C) arrives
  - (D) marked
2. It can be inferred from paragraph 1 that one positive aspect of greenhouse gases is that they
  - (A) absorb 70 percent of the Sun’s energy
  - (B) can be rapidly replenished in the atmosphere
  - (C) remove pollutants from ecosystems
  - (D) help keep Earth warm
3. According to paragraph 2, what can be said about the effects of global changes?
  - (A) The local plants and animals will be permanently damaged.
  - (B) It is hard to know exactly what form the local effects will take.
  - (C) Seawater levels will fall around the world.
  - (D) The effects will not occur in some regions of the world.
4. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect choices change the meaning in important ways or leave out essential information.
  - (A) The rapid rise of carbon dioxide concentrations can be attributed largely to the actions of humans.
  - (B) Predictions about atmospheric concentrations of carbon dioxide indicate that the influence of human activities will double soon.
  - (C) In the next 50 to 100 years, human activities will no longer have an influence on atmospheric carbon dioxide concentrations.
  - (D) Human activities can influence current predictions about atmospheric conditions.
5. The word “consensus” in the passage is closest in meaning to
  - (A) publication
  - (B) debate
  - (C) collection
  - (D) agreement
6. The phrase “this process” refers to
  - (A) the interaction between physical and biological components of Earth’s climate system
  - (B) the increase of greenhouse gases in the atmosphere
  - (C) predicting future global climate
  - (D) global circulation models
7. According to paragraph 3, rainfall amounts are predicted to decrease in what parts of the world?
  - (A) In mid-latitude regions
  - (B) In tropical areas
  - (C) In mid-continental regions
  - (D) At the poles
8. The word “incorporate” in the passage is closest in
  - (A) describe
  - (B) include
  - (C) expand
  - (D) present
9. The word “virtually” in the passage is closest in meaning to
  - (A) nearly
  - (B) presumably
  - (C) usually
  - (D) visually
10. According to paragraph 3, climate models predict that all of the following events will occur with the increase in greenhouse gases EXCEPT
  - (A) greater seasonal temperature changes

- (B) prolonged heat waves
- (C) increased diversity of plants and animals
- (D) longer dry periods

**11. The author's main purpose in paragraph 5 is to**

- (A) explain the process of studying organism responses to climate change
- (B) stress the importance of learning how climate affects plants and animals
- (C) illustrate an important point about factors affecting biodiversity
- (D) examine current research practices on the distribution of organisms on Earth

**12. Look at the terms "greenhouse gases," "atmospheric circulation patterns," "global scale," and "biotic factors". Which of these terms is defined in the passage?**

- (A) Greenhouse gases
- (B) Atmospheric circulation patterns
- (C) Global scale
- (D) Biotic factors

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Much of this work depends on the assumption that life forms adapted to a particular climate in the present were adapted to the same type of climate in the past.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below.**

**Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Human population on Earth is affecting both the atmosphere and the ecosystems.

**Answer choices**

- (A) The survival of organisms on Earth is directly related to the amount of fossil fuels that are consumed.
- (B) Atmospheric carbon dioxide concentrations are rising quickly.
- (C) Scientists are working on ways to make precise forecasts of how the increase of greenhouse gases will affect Earth.
- (D) Scientists predict that temperature changes would be greater at the poles than at the equator.
- (E) Global circulation models can be used to measure the concentrations of chlorofluorocarbons in the atmosphere.
- (F) The ability to make accurate predictions about global climate presents several difficulties.

### 参考答案与解析

1. 选 **C**。目前暂无解析。
2. 选 **D**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **A**。目前暂无解析。
5. 选 **D**。目前暂无解析。
6. 选 **C**。目前暂无解析。
7. 选 **A**。目前暂无解析。
8. 选 **B**。目前暂无解析。
9. 选 **A**。目前暂无解析。
10. 选 **C**。目前暂无解析。
11. 选 **B**。目前暂无解析。
12. 选 **A**。目前暂无解析。
13. 选 **D**。目前暂无解析。
14. 选 **BCF**。目前暂无解析。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。

**自我评价**

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**What is a Community?**

The Black Hills forest, the prairie riparian forest, and other forests of the western United States can be separated by the distinctly different combinations of species they comprise. It is easy to distinguish between prairie riparian forest and Black Hills forest—one is a broad-leaved forest of ash and cottonwood trees, the other is a coniferous forest of ponderosa pine and white spruce trees. One has kingbirds; the other juncos (birds with white outer tail feathers). The fact that ecological communities are indeed, recognizable clusters of species led some early ecologists, particularly those living in the beginning of the twentieth century, to claim that communities are highly integrated, precisely balanced assemblages. This claim harkens back to even earlier arguments about the existence of a balance of nature, where every species is there for a specific purpose, like a vital part in a complex machine. Such a belief would suggest that to remove any species, whether it be plant, bird, or insect, would somehow disrupt the balance, and the habitat would begin to deteriorate. Likewise, to add a species may be equally disruptive.

One of these pioneer ecologists was Frederick Clements, who studied ecology extensively throughout the Midwest and other areas in North America. He held that within any given region of climate, ecological communities tended to slowly converge toward a single endpoint, which he called the “climatic climax.” This “climax” community was, in Clements’s mind, the most well-balanced, integrated grouping of species that could occur within that particular region. Clements even thought that the process of ecological succession—the replacement of some species by others over time—was somewhat akin to the development of an organism, from embryo to adult. Clements thought that succession represented discrete stages in the development of the community (rather like infancy, childhood, and adolescence), terminating in the climatic “adult” stage, when the community became self-reproducing and succession ceased. Clements’s view of the ecological community reflected the notion of a precise balance of nature.

Clements was challenged by another pioneer ecologist, Henry Gleason, who took the opposite view. Gleason viewed the community as largely a group of species with similar tolerances to the stresses imposed by climate and other factors typical of the region. Gleason saw the element of chance as important in influencing where species occurred. His concept of the community suggests that nature is not highly integrated. Gleason thought succession could take numerous directions, depending upon local circumstances.

■ Who was right? ■ Many ecologists have made precise measurements, designed to test the assumptions of both the Clements and Gleason models. ■ For instance, along mountain slopes, does one life zone, or habitat type, grade sharply or gradually into another? ■ If the divisions are sharp, perhaps the reason is that the community is so well integrated, so holistic, so like Clements viewed it, that whole clusters of species must remain together. If the divisions are gradual, perhaps, as Gleason suggested, each species is responding individually to its environment, and clusters of species are not so integrated that they must always occur together.

It now appears that Gleason was far closer to the truth than Clements. The ecological community is largely an accidental assemblage of species with similar responses to a particular climate. Green ash trees are found in association with plains cottonwood trees because both can survive well on floodplains and the competition between them is not so strong that only one can persevere. One ecological community often flows into another so gradually that it is next to impossible to say where one leaves off and the other begins. Communities are individualistic.

This is not to say that precise harmonies are not present within communities. Most flowering plants could not exist were it not for their pollinators—and vice versa. Predators, disease organisms, and competitors all influence the abundance and distribution of everything from oak trees to field mice. **But if we see a precise balance of nature, it is largely an artifact of our perception, due to the illusion that nature, especially a complex system like a forest, seems so unchanging from one day to the next.**

1. **In paragraph 1, why does the author distinguish between prairie riparian forest and Black Hills forest?**
  - (A) To highlight the difference between the views of various ecologists about the nature of ecological communities
  - (B) To illustrate why some ecologists tended to view ecological communities as highly integrated
  - (C) To demonstrate that one forest has a greater variety of species than the other
  - (D) To show how these two forests differ from others in the United States
2. **According to paragraph 1, what was a common claim about ecological communities before the early twentieth century?**
  - (A) Every species in a community has a specific role in that community.
  - (B) It is important to protect communities by removing certain species.
  - (C) A precise balance is difficult to maintain in an ecological community.
  - (D) It is necessary for new species to be added quickly as ecological communities develop.
3. **The word “clusters” in the passage is closest in meaning to**
  - (A) models
  - (B) categories
  - (C) examples
  - (D) groups
4. **According to paragraph 1, the belief in a balance of nature suggests that removing a species from an ecological community would have which of the following effects?**
  - (A) It would reduce competition between the remaining species of the community.
  - (B) It would produce a different, but equally balanced, community.
  - (C) It would lead to a decline in the community.
  - (D) It would cause more harm than adding a species to the community.
5. **The word “ceased” in the passage is closest in meaning to**
  - (A) succeeded
  - (B) balanced
  - (C) ended
  - (D) advanced
6. **Which of the following best represents the view of ecological communities associated with Frederick Clements in paragraph 2?**
  - (A) Only when all species in a community are at the reproductive stage of development is an ecological community precisely balanced.
  - (B) When an ecological community achieves “climatic climax,” it begins to decline.
  - (C) All climates have similar climax communities.
  - (D) Ecological communities eventually reach the maximum level of balance that is possible for their region.
7. **According to paragraph 2, Clements compared the process of ecological succession to**
  - (A) the replacement of animal habitats over time
  - (B) the development of an organism
  - (C) self-reproduction
  - (D) changes in climate
8. **According to Gleason in paragraph 3, the occurrence of a species in a particular community is influenced by**
  - (A) unpredictable events
  - (B) how individualistic the species is
  - (C) the number of other species present
  - (D) the tolerance of other species to stresses
9. **What did the ecologists in paragraph 4 hope to determine with their measurements?**
  - (A) Whether different species compete for the same environments
  - (B) Whether habitats are sharply separated or gradually flow into each other
  - (C) Whether succession differs in different types of habitats

(D) Whether integrated communities survive better than independent communities

**10. In paragraph 5, why does the author mention green ash trees and plains cottonwood trees?**

- (A) To support the current view about how ecological communities develop
- (B) To provide an example of species that prefer to live on floodplains
- (C) To provide evidence that supports the theory of Clements
- (D) To show where one ecological community stops and the other begins

**11. The word “persevere” in the passage is closest in meaning to**

- (A) reproduce
- (B) fail
- (C) expand
- (D) continue

**12. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 6? Incorrect choices change the meaning in important ways or leave out essential information.**

- (A) We see nature as precisely balanced because nature is unchanging.
- (B) A precise balance of nature is not possible because of the complexity of natural systems.
- (C) Our sense that nature is precisely balanced results from the illusion that it is unchanging.
- (D) Because nature is precisely balanced, complex systems do not seem to change.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Their research has helped to decide between the two views because it has focused on questions to which Clements and Gleason would give opposing answers.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Over time, a variety of views have been formed on the structure of ecological communities.

**Answer choices**

- (A) Clements held that ecological communities were like organisms that compete with each other for dominance in a particular climatic region.
- (B) Clements saw the community as a collection of thoroughly interdependent species progressing toward a single climax community.
- (C) Gleason held that within a single climatic region, differing local factors would cause ecological communities to develop in different ways.
- (D) Gleason believed that sharp divisions would exist between species in different habitats.
- (E) Today’s ecologists recognize that ecological communities must be precisely and permanently balanced.
- (F) The current thinking is that communities are individualistic and largely accidental collections of species with similar needs and tolerances.

### 参考答案与解析

1. 选 **B**。目前暂无解析。
2. 选 **A**。目前暂无解析。
3. 选 **D**。目前暂无解析。
4. 选 **C**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **D**。目前暂无解析。
7. 选 **B**。目前暂无解析。
8. 选 **A**。目前暂无解析。
9. 选 **B**。目前暂无解析。
10. 选 **A**。目前暂无解析。
11. 选 **D**。目前暂无解析。
12. 选 **C**。目前暂无解析。
13. 选 **C**。目前暂无解析。
14. 选 **BCF**。目前暂无解析。

### 笔记区

建议将生词和陌生的语法条目记在这里，并时常翻看。



**自我评价**

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难度：易 / 中 / 难

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**Habitats and Chipmunk Species**

There are eight chipmunk species in the Sierra Nevada mountain range, and most of them look pretty much alike. But eight different species of chipmunks scurrying around a picnic area will not be found. Nowhere in the Sierra do all eight species occur together. Each species tends strongly to occupy a specific habitat type, within an elevational range, and the overlap among them is minimal.

The eight chipmunk species of the Sierra Nevada represent but a few of the 15 species found in western North America, yet the whole of eastern North America makes do with but one species: the Eastern chipmunk. Why are there so many very similar chipmunks in the West? The presence of tall mountains interspersed with vast areas of arid desert and grassland makes the West ecologically far different from the East. The West affords much more opportunity for chipmunk populations to become geographically isolated from one another, a condition of species formation. Also, there are more extremes in western habitats. In the Sierra Nevada, high elevations are close to low elevations, at least in terms of mileage, but ecologically they are very different.

Most ecologists believe that ancient populations of chipmunks diverged genetically when isolated from one another by mountains and unfavorable ecological habitat. These scattered populations first evolved into races—adapted to the local ecological conditions—and then into species, reproductively isolated from one another. This period of evolution was relatively recent, as evidenced by the similar appearance of all the western chipmunk species.

**Ecologists have studied the four chipmunk species that occur on the eastern slope of the Sierra and have learned just how these species interact while remaining separate, each occupying its own elevational zone.** The sagebrush chipmunk is found at the lowest elevation, among the sagebrush. The yellow pine chipmunk is common in low to mid-elevations and open conifer forests, including pinon and ponderosa and Jeffrey pine forests. The lodgepole chipmunk is found at higher elevations, among the lodgepoles, firs, and high-elevation pines. The alpine chipmunk is higher still, venturing among the talus slopes, alpine meadows, and high-elevation pines and junipers. ■ Obviously, the ranges of each species overlap. ■ Why don't sagebrush chipmunks move into the pine zones? ■ Why don't alpine chipmunks move to lower elevations and share the conifer forests with lodgepole chipmunks? ■

The answer, in one word, is aggression. Chipmunk species actively defend their ecological zones from encroachment by neighboring species. The yellow pine chipmunk is more aggressive than the sagebrush chipmunk, possibly because it is a bit larger. It successfully bullies its smaller evolutionary cousin, excluding it from the pine forests. Experiments have shown that the sagebrush chipmunk is physiologically able to live anywhere in the Sierra Nevada, from high alpine zones to the desert. The little creature is apparently restricted to the desert not because it is specialized to live only there but because that is the only habitat where none of the other chipmunk species can live. The fact that sagebrush chipmunks tolerate very warm temperatures makes them, and only them, able to live where they do. The sagebrush chipmunk essentially occupies its habitat by default. In one study, ecologists established that yellow pine chipmunks actively exclude sagebrush chipmunks from pine forests; the ecologists simply trapped all the yellow pine chipmunks in a section of forest and moved them out. Sagebrush chipmunks immediately moved in, but yellow pine chipmunks did not enter sagebrush desert when sagebrush chipmunks were removed.

The most aggressive of the four eastern-slope species is the lodgepole chipmunk, a feisty rodent indeed. It actively prevents alpine chipmunks from moving downslope, and yellow pine chipmunks from moving upslope. There is logic behind the lodge-pole's aggressive demeanor. It lives in the cool, shaded conifer forests, and of the four species, it is the least able to tolerate heat stress. It is, in other words, the species of the strictest habitat needs: it simply must be in those shaded forests. However, if it shared its habitat with alpine and yellow pine chipmunks, either or both of these species might outcompete it, taking most of the available food. Such a competition could effectively eliminate lodgepole chipmunks from the habitat. Lodgepoles survive only by virtue of their aggression.

1. **Why does the author mention a “picnic area” in paragraph 1?**
  - (A) To identify a site where a variety of different species of chipmunks can be seen
  - (B) To support the point that each species of chipmunk inhabits a distinct location
  - (C) To emphasize the idea that all species of chipmunks have a similar appearance
  - (D) To provide an example of a location to which chipmunks are likely to scurry for food
2. **The phrase “interspersed with” in the passage is closest in meaning to**
  - (A) distributed among
  - (B) covered by
  - (C) positioned above
  - (D) evolved from
3. **In paragraph 2, the author indicates that a large variety of chipmunk species exist in western North America because of**
  - (A) a large migration of chipmunks from eastern North America in an earlier period
  - (B) the inability of chipmunks to adapt to the high mountainous regions of eastern North America
  - (C) the ecological variety and extremes of the West that caused chipmunks to become geographically isolated
  - (D) the absence of large human populations that discouraged species formation among chipmunks in the East
4. **The word “diverged” in the passage is closest in meaning to**
  - (A) declined
  - (B) competed
  - (C) progressed
  - (D) separated
5. **The phrase “one another” in the passage refers to**
  - (A) populations
  - (B) races
  - (C) ecological conditions
  - (D) species
6. **Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 4? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) Ecologists studied how the geographic characteristics of the eastern slope of the Sierra influenced the social development of chipmunks.
  - (B) Ecologists learned exactly how chipmunk species separated from each other on the eastern slope of the Sierra relate to one another.
  - (C) Ecologists discovered that chipmunks of the eastern slope of the Sierra invade and occupy higher elevational zones when threatened by another species.
  - (D) Ecologists studied how individual chipmunks of the eastern slope of the Sierra avoid interacting with others of their species.
7. **Where does paragraph 4 indicate that the yellow pine chipmunk can be found in relationship to the other species of the eastern slope of the Sierra?**
  - (A) Below the sagebrush chipmunk
  - (B) Above the alpine chipmunk
  - (C) At the same elevation as the sagebrush chipmunk
  - (D) Below the lodgepole chipmunk
8. **The word “encroachment” in the passage is closest in meaning to**
  - (A) complete destruction
  - (B) gradual invasion
  - (C) excessive development
  - (D) substitution
9. **Paragraph 5 mentions all of the following as true of the relationship of sagebrush chipmunks to their habitats EXCEPT**

- (A) Sagebrush chipmunks are able to survive in any habitat of the Sierra Nevada.
- (B) Sagebrush chipmunks occupy their habitat because of the absence of competition from other chipmunks.
- (C) Sagebrush chipmunks are better able to survive in hot temperatures than other species of chipmunks.
- (D) Sagebrush chipmunks spend the warm season at the higher elevations of the alpine zone.

**10. Which of the following statements is supported by the results of the experiment described at the end of paragraph 5?**

- (A) The habitat of the yellow pine chipmunk is a desirable one to other species, but the habitat of the sagebrush chipmunk is not.
- (B) It was more difficult to remove sagebrush chipmunks from their habitat than it was to remove yellow pine chipmunks from theirs.
- (C) Yellow pine chipmunks and sagebrush chipmunks require the same environmental conditions in their habitats.
- (D) The temperature of the habitat is not an important factor to either the yellow pine chipmunk or the sagebrush chipmunk.

**11. According to paragraph 6, why is the lodgepole chipmunk so protective of its habitat from competing chipmunks?**

- (A) It has specialized food requirements.
- (B) It cannot tolerate cold temperatures well.
- (C) It requires the shade provided by forest trees.
- (D) It prefers to be able to move between areas that are downslope and upslope.

**12. The phrase “by virtue of” in the passage is closest in meaning to**

- (A) in spite of
- (B) because of
- (C) unconcerned about
- (D) with attention to

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Yet each species remains within a fairly well-defined elevational zone.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

A variety of chipmunk species inhabit western North America.

**Answer choices**

- (A) Ecological variation of the Sierra Nevada resulted in the differentiation of chipmunk species.
- (B) Only one species of chipmunk inhabits eastern North America.
- (C) Although chipmunk species of the Sierra Nevada have the ability to live at various elevations, each species inhabits a specifically restricted one.
- (D) Chipmunks aggressively defend their habitats from invasion by other species of chipmunks.
- (E) Experimental studies indicate that sagebrush chipmunks live in the desert because of their physiological requirements.
- (F) The most aggressive of the chipmunk species is the lodgepole chipmunk.

### 参考答案与解析

1. 选 **B**。目前暂无解析。
2. 选 **A**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **D**。目前暂无解析。
5. 选 **B**。目前暂无解析。
6. 选 **B**。目前暂无解析。
7. 选 **D**。目前暂无解析。
8. 选 **B**。目前暂无解析。
9. 选 **D**。目前暂无解析。
10. 选 **A**。目前暂无解析。
11. 选 **C**。目前暂无解析。
12. 选 **B**。目前暂无解析。
13. 选 **B**。目前暂无解析。
14. 选 **ACD**。目前暂无解析。

### 笔记区

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**自我评价**

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**Cetacean Intelligence**

We often hear that whales, dolphins, and porpoises are as intelligent as humans maybe even more so. Are they really that smart? There is no question that cetaceans are among the most intelligent of animals. Dolphins, killer whales, and pilot whales in captivity quickly learn tricks. The military has trained bottlenose dolphins to find bombs and missile heads and to work as underwater spies.

This type of learning, however, is called conditioning. ■ The animal simply learns that when it performs a particular behavior, it gets a reward, usually a fish. ■ Many animals, including rats, birds, and even invertebrates, can be conditioned to perform tricks. ■ We certainly don't think of these animals as our mental rivals. ■ Unlike most other animals, however, dolphins quickly learn by observations and may spontaneously imitate human activities. One tame dolphin watched a diver cleaning an underwater viewing window, seized a feather in its beak, and began imitating the diver—complete with sound effects! Dolphins have also been seen imitating seals, turtles, and even water-skiers.

Given the seeming intelligence of cetaceans, people are always tempted to compare them with humans and other animals. Studies on discrimination and problem-solving skills in the bottlenose dolphin, for instance, have concluded that its intelligence lies "somewhere between that of a dog and a chimpanzee." Such comparisons are unfair. It is important to realize that intelligence is a very human concept and that we evaluate it in human terms. After all, not many people would consider themselves stupid because they couldn't locate and identify a fish by its echo. Why should we judge cetaceans by their ability to solve human problems?

Both humans and cetaceans have large brains with an expanded and distinctively folded surface, the cortex. The cortex is the dominant association center of the brain, where abilities such as memory and sensory perception are centered. Cetaceans have larger brains than ours, but the ratio of brain to body weight is higher in humans. Again, direct comparisons are misleading. In cetaceans it is mainly the portions of the brain associated with hearing and the processing of sound information that are expanded. The enlarged portions of our brain deal largely with vision and hand-eye coordination. Cetaceans and humans almost certainly perceive the world in very different ways. Their world is largely one of sounds, ours one of sights.

Contrary to what is depicted in movies and on television, the notion of "talking" to dolphins is also misleading. Although they produce a rich repertoire of complex sounds, they lack vocal cords and their brains probably process sound differently from ours. Bottlenose dolphins have been trained to make sounds through the blowhole that sound something like human sounds, but this is a far cry from human speech. By the same token, humans cannot make whale sounds. We will probably never be able to carry on an unaided conversation with cetaceans.

As in chimpanzees, captive bottlenose dolphins have been taught American Sign Language. These dolphins have learned to communicate with trainers who use sign language to ask simple questions. Dolphins answer back by pushing a "yes" or "no" paddle. They have even been known to give spontaneous responses not taught by the trainers. Evidence also indicates that these dolphins can distinguish between commands that differ from each other only by their word order, a truly remarkable achievement. Nevertheless, dolphins do not seem to have a real language like ours. Unlike humans, dolphins probably cannot convey very complex messages.

Observations of cetaceans in the wild have provided some insights on their learning abilities. Several bottlenose dolphins off Western Australia, for instance, have been observed carrying large cone-shaped sponges over their beaks. They supposedly use the sponges for protection against stingrays and other hazards on the bottom as they search for fish to eat. This is the first record of the use of tools among wild cetaceans.

Instead of "intelligence," some people prefer to speak of "awareness." In any case, cetaceans probably have a very different awareness and perception of their environment than do humans. Maybe one day we will come to understand cetaceans on their terms instead of ours, and perhaps we will discover a mental sophistication rivaling our own.

1. **The author asks the question “Are they really that smart?” for which of the following reasons?**
  - (A) To question the notion that humans are the most intelligent of animals.
  - (B) To introduce the discussion of intelligence that follows.
  - (C) To explain why dolphins, killer whales, and pilot whales can learn tricks.
  - (D) To emphasize the ways that dolphins can help the military.
2. **According to the passage, which of the following animals is most likely to learn by watching another animal perform an activity?**
  - (A) rats
  - (B) birds
  - (C) invertebrates
  - (D) dolphins
3. **The word “tempted” in the passage is closest in meaning to**
  - (A) conditioned
  - (B) reluctant
  - (C) inclined
  - (D) invited
4. **According to the passage, why are the studies that conclude that dolphin intelligence is “somewhere between that of a dog and a chimpanzee” not correct?**
  - (A) The human method of drawing comparisons is not relevant to animal intelligence.
  - (B) Dolphins have actually been shown to be much more intelligent than chimpanzees.
  - (C) The studies were not conducted according to standard research methods.
  - (D) Dolphins do not typically demonstrate conditioned responses for humans to observe.
5. **The word “dominant” in the passage is closest in meaning to**
  - (A) local
  - (B) natural
  - (C) chief
  - (D) specific
6. **The word “spontaneous” in the passage is closest in meaning to**
  - (A) sophisticated
  - (B) sensible
  - (C) appropriate
  - (D) unprompted
7. **The word “insights” in the passage is closest in meaning to**
  - (A) examples
  - (B) understanding
  - (C) directions
  - (D) discussion
8. **Scientific observations show that cetaceans are able to do all of the following EXCEPT**
  - (A) use natural objects as tools for self-protection
  - (B) produce complex sounds through their blowholes
  - (C) answer spoken questions
  - (D) distinguish between very similar spoken sentences
9. **The word “hazards” in the passage is closest in meaning to**
  - (A) objects
  - (B) dangers
  - (C) species
  - (D) debris
10. **What does the author conclude about the intelligence of cetaceans?**
  - (A) It is not appropriate to judge cetacean intelligence in human terms.
  - (B) Cetaceans probably possess a mental sophistication that is as complex as that of humans.
  - (C) Although cetaceans may appear to be intelligent, they have fewer problem-solving skills than most animals.

(D) Their ability to learn American Sign Language indicates that cetaceans have a high level of intelligence.

**11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

This reward is merely one possible type of positive reinforcement that leads to more frequent repetition of the behavior in the future.

**Where would the sentence best fit?**

**12. Directions: Select the appropriate phrases from the answer choices below and match them to the type of animal to which they relate. ONE of the answer choices will NOT be used. Write your answer choices in the spaces where they belong.**

Humans (TWO):

Cetaceans (TWO):

**Answer choices**

- (A) The ability to converse unaided with other species
- (B) A brain with a cortex
- (C) A set of vocal cords
- (D) The ability to use tools
- (E) The ability to locate objects by using echo
- (F) An enlarged portion of the brain for processing sound
- (G) An enlarged portion of the brain for processing vision
- (H) The ability to learn by observation

### 参考答案与解析

1. 选 **B**。目前暂无解析。
2. 选 **D**。目前暂无解析。
3. 选 **C**。目前暂无解析。
4. 选 **A**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **D**。目前暂无解析。
7. 选 **B**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **B**。目前暂无解析。
10. 选 **A**。目前暂无解析。
11. 选 **B**。目前暂无解析。
12. Humans 选 **CG**, Cetaceans 选 **EF**。目前暂无解析。

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**A Model of Urban Expansion**

In the early twentieth century, the science of sociology found supporters in the United States and Canada partly because the cities there were growing so rapidly. It often appeared that North American cities would be unable to absorb all the new comers arriving in such large numbers. Presociological thinkers like Frederick Law Olmsted, the founder of the movement to build parks and recreation areas in cities, and Jacob Riis, an advocate of slum reform, urged the nation's leaders to invest in improving the urban environment, building parks and beaches, and making better housing available to all. These reform efforts were greatly aided by sociologists who conducted empirical research on the social conditions in cities. In the early twentieth century, many sociologists lived in cities like Chicago that were characterized by rapid population growth and serious social problems. It seemed logical to use empirical research to construct theories about how cities grow and change in response to major social forces as well as more controlled urban planning.

**The founders of the Chicago school of sociology, Robert Park and Ernest Burgess, attempted to develop a dynamic model of the city, one that would account not only for the expansion of cities in terms of population and territory but also for the patterns of settlement and land use within cities.** They identified several factors that influence the physical form of cities. As Park stated, among them are "transportation and communication, tramways and telephones, newspapers and advertising, steel construction and elevators—all things, in fact, which tend to bring about at once a greater mobility and a greater concentration of the urban populations."

Park and Burgess based their model of urban growth on the concept of "natural areas"—that is, areas such as occupational suburbs or residential enclaves in which the population is relatively homogeneous and land is used in similar ways without deliberate planning. Park and Burgess saw urban expansion as occurring through a series of "invasions" of successive zones or areas surrounding the center of the city. For example, people from rural areas and other societies "invaded" areas where housing was inexpensive. Those areas tended to be close to the places where they worked. In turn, people who could afford better housing and the cost of commuting "invaded" areas farther from the business district.

Park and Burgess's model has come to be known as the "concentric-zone model" (represented by the figure). Because the model was originally based on studies of Chicago, its center is labeled "Loop," the term commonly applied to that city's central commercial zone. Surrounding the central zone is a "zone in transition," an area that is being invaded by business and light manufacturing. The third zone is inhabited by workers who do not want to live in the factory or business district but at the same time need to live reasonably close to where they work. The fourth or residential zone consists of upscale apartment buildings and single-family homes. And the outermost ring, outside the city limits, is the suburban or commuters' zone; its residents live within a 30- to 60-minute ride of the central business district.

Studies by Park, Burgess, and other Chicago-school sociologists showed how new groups of immigrants tended to be concentrated in separate areas within inner-city zones, where they sometimes experienced tension with other ethnic groups that had arrived earlier. Over time, however, each group was able to adjust to life in the city and to find a place for itself in the urban economy. ■ Eventually many of the immigrants moved to unsegregated areas in outer zones; the areas they left behind were promptly occupied by new waves of immigrants.

The Park and Burgess model of growth in zones and natural areas of the city can still be used to describe patterns of growth in cities that were built around a central business district and that continue to attract large numbers of immigrants. ■ But this model is biased toward the commercial and industrial cities of North America, which have tended to form around business centers rather than around palaces or cathedrals, as is often the case in some other parts of the world. ■ Moreover, it fails to account for other patterns of urbanization, such as the rapid urbanization that occurs along commercial transportation corridors and the rise of nearby satellite cities. ■

1. **Which of the following can be inferred from paragraph 1 about what Olmsted and Riis had in common?**
  - (A) Both constructed theories based on empirical research on cities.
  - (B) Both were among a large number of newcomers to North American cities.
  - (C) Both wanted to improve the conditions of life in cities.
  - (D) Both hoped to reduce the rapid growth of large cities.
2. **Which of the following best states the relationship that Olmsted and Riis had to the study of sociology?**
  - (A) Their goals were supported by the research conducted later by sociologists.
  - (B) Their approach led them to oppose empirical sociological studies.
  - (C) They had difficulty establishing that their work was as important as sociological research.
  - (D) They used evidence from sociological research to urge national leaders to invest in urban development.
3. **Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect choices change the meaning in important ways or leave out essential information.**
  - (A) The Chicago school of sociology founded by Park and Burgess attempted to help the population of growing cities protect the land around them.
  - (B) The model that Park and Burgess created was intended to explain both why the population and area of a city like Chicago grew and in what way urban land was used or settled.
  - (C) The founders of the Chicago school of sociology wanted to make Chicago a dynamic model for how other cities should use and settle their land.
  - (D) Park and Burgess were concerned that cities like Chicago should follow a model of good land use as the population grew and settled new areas.
4. **The author includes the statement by Robert Park in paragraph 2 in order to**
  - (A) establish the specific topics about which Park and Burgess may have disagreed
  - (B) identify the aspects of Chicago's development that required careful planning
  - (C) specify some of the factors that contributed to the pattern of development of cities
  - (D) compare the definitions given by Park and Burgess for the physical form of cities
5. **Paragraph 3 indicates that all of the following are true of "natural areas" as conceived by Park and Burgess EXCEPT**
  - (A) Use of the land in natural areas follows a consistent pattern but is generally unplanned.
  - (B) People living in natural areas tend to have much in common.
  - (C) Natural areas are usually protected from "invasion" by people in other areas.
  - (D) Natural areas are an important basic component of the model Park and Burgess developed.
6. **According to paragraph 4, why is the term "Loop" used in the concentric-zone model?**
  - (A) It indicates the many connections between each of the zones in the model.
  - (B) It indicates that zones are often in transition and frequently changing.
  - (C) It reflects the fact that the model was created with the city of Chicago in mind.
  - (D) It emphasizes the fact that populations often returned to zones in which they used to live.
7. **Which of the following can be inferred from paragraph 4 about the third zone?**
  - (A) It is the most expensive area in which to live.
  - (B) It does not have factories and businesses.
  - (C) People who live there travel long distances to work.
  - (D) Most of the residents there work and live in the same zone.
8. **The word "outermost" in the passage is closest in meaning to**
  - (A) most visible
  - (B) best protected
  - (C) farthest away
  - (D) wealthiest
9. **The word "they" in the passage refers**
  - (A) Chicago-school sociologists

- (B) new groups of immigrants
- (C) separate areas
- (D) inner-city zones

**10. The word “concentrated” in the passage is closest in meaning to**

- (A) divided
- (B) reduced
- (C) interested
- (D) gathered

**11. The word “promptly” in the passage is closest in meaning to**

- (A) quickly
- (B) usually
- (C) eventually
- (D) easily

**12. Paragraph 6 indicates which of the following about the application of the Park and Burgess model to modern North American cities?**

- (A) It is especially useful for those cities that have been used as models for international development.
- (B) It remains useful in explaining the development of some urban areas but not all cities.
- (C) It can be applied equally well to cities with commercial centers and those with palaces and cathedrals at their center.
- (D) It is less applicable to modern cities because of changes in patterns of immigration.

**13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.**

Typical of this kind of urban growth is the steel-producing center of Gary, Indiana, outside of Chicago, which developed because massive heavy industry could not be located within the major urban center itself.

**Where would the sentence best fit?**

**14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.**

Two sociologists, Robert Park and Ernest Burgess, developed the “concentric-zone model” of how cities use land and grow.

**Answer choices**

- (A) The model was developed to explain how the city of Chicago was developing around centrally located transportation and communication systems.
- (B) The model arose out of concern for the quality of life in the rapidly growing cities of early twentieth-century America.
- (C) The founders of the model did not believe in formal city planning and instead advocated growth through the expansion of so-called “natural areas.”
- (D) According to the model, a group new to the city tends to live together near the center and over time moves to outer areas that are more diverse ethnically and occupationally.
- (E) The model is applicable to cities that grow by attracting large numbers of workers to centrally located businesses.
- (F) The model predicts that eventually the inner city becomes so crowded that its residents move to new satellite cities outside the city limits.

### 参考答案与解析

1. 选 **C**。目前暂无解析。
2. 选 **A**。目前暂无解析。
3. 选 **B**。目前暂无解析。
4. 选 **C**。目前暂无解析。
5. 选 **C**。目前暂无解析。
6. 选 **C**。目前暂无解析。
7. 选 **B**。目前暂无解析。
8. 选 **C**。目前暂无解析。
9. 选 **B**。目前暂无解析。
10. 选 **D**。目前暂无解析。
11. 选 **A**。目前暂无解析。
12. 选 **B**。目前暂无解析。
13. 选 **D**。目前暂无解析。
14. 选 **BDE**。目前暂无解析。

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