

# TPO 1

## READING

### Paragraph 1:

Q1 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 agricultural 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 for the people in Uruk
- D. Scholars believe that the inhabitants of Uruk were able to support themselves from produce grown in field surrounding the city.

Q2 The word “surpassing” in the passage is closest in meaning to

- A. preceding
- B. exceeding
- C. challenging
- D. outlasting

Q3 According to paragraph 1, all of the following are true of the ancient settlement at Uruk EXCEPT:

### 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 that 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.

- 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.

## Paragraph 2

Q4 The word “intact” in the passage is closest in meaning to

- A. unsold
- B. unused
- C. undamaged
- D. unpainted

Q5 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.

Q6 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 craft known during the fourth millennium.

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.

### Paragraph 3

Q7 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.

Q8 The word “interpreted” in the passage is closest in meaning to

- A. documented
- B. debated
- C. displayed
- D. understood

Q9 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 existed before Uruk.
- D. To contrast the development of weaving and pottery in Uruk.

### Paragraph 4

Q10 The word “legible” in the passage is closest in meaning to

- A. printable
- B. enjoyable
- C. recognizable

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 was involved here.

Objects themselves suggest that they were the work of skilled professionals. In the late Uruk period (3500-3100 B.C.E.), there first appeared a type of object that remained characteristic for Mesopotamia throughout its entire history: the

D. available

Q11 Paragraph 4 suggests which of the following about the significance 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.

Q12 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

Q13 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? Click on a square to add the sentence to the passage.

Q14 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

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 carve it was far superior to that for stamp seals, which had happened in the early Neolithic period (approximately 10,000-5000 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.

ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click VIEW NEXT.

Uruk, located in ancient Mesopotamia, flourished in the fourth millennium B.C.E. and was the first city in human history

A. A variety of evidence indicates that Uruk, while it supported itself primarily by agriculture, also had specialized craft workers.

B. Cylinder seals from the late Uruk period are far superior to the stamp seals of the earlier Neolithic period.

C. The monumental sculptures of Uruk were made by the specialist stone cutters who also produced small-scale relief scenes on shell, bone and faience.

D. 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.

E. The large number, standardized sizes, and simple molded construction of a type of pottery produced in Uruk demonstrate specialized, centrally organized mass production.

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.

## 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

### Paragraph 1

Q1 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

Q2 The word “converge” in the passage is closest in meaning to

- A. expand
- B. form
- C. rise
- D. move closer

## Paragraph 2

Q3 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.

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 semiliquid 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.

### Paragraph 3

Q4 The word “instructive” in the passage is closest in meaning to

- A. clear
- B. detailed
- C. informative
- D. familiar

Q5 The word “eroded” in the passage is closest in meaning to

- A. worn down
- B. scattered
- C. developed
- D. deserted

Q6 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

### Paragraph 4

Q7 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.

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 some are progressively more eroded, and therefore probably 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. Then, as the plate moved slowly northwest, new volcanic islands would have formed 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

- 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.

Q8 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 periods of time.
- D. They get increasingly older away from the present hot spots

### Paragraph 5

Q9 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

Q10 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

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 time scales, reconstructing the world's geography by backtracking along the hot-spot trail works



to the length of the Hawaiian Island chain in the past 50 million years.

D. The Pacific Plate is located above fewer mantle plumes than other plates are.

only for the last 5 percent or so of geologic time.

Q11 The word "current" in the passage is closest in meaning to

- A. original
- B. ideal
- C. relative
- D. present

Q12 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 5percent of geologic time.
- B. Hawaii did not exist 50 million 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

Q13 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? Click on a square to add the sentence to the passage.

Q14 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.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click VIEW NEXT. Although volcanic activity is concentrated on the edges of tectonic plates, such activity can occur in the interiors of plates as well.

A. Our understanding of volcanic islands comes from Daly' s and Wilson' s observations of the Hawaiian Islands, which was later confirmed by plate-tectonic theory.

B. It has only recently been discovered that tectonic plates are closely fitting rather than loosely constructed, as geologists previously believed.

C. 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.

D. 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.

E. 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.

F. The Pacific Plate has existed for as long as the Hawaiian Islands have existed, namely for more than 80 million years.

## **Predator-Prey Cycles**

How do predators affect populations of the

### **Paragraph 1**

Q1 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 what 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

## Paragraph 2

Q2 The word “rebound” in the passage is closest in meaning to

- A. escape
- B. recover
- C. survive
- D. resist

Q3 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.

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 levels but not to 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 populations may continue in this cyclical pattern for some time.

## Paragraph 3

Population cycles are characteristic of small

Q4 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.

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.

Q5 The word "roughly" in the passage is closest in meaning to

- A. usually
- B. repeating
- C. approximately
- D. observable

Q6 The word "generating" in the passage is closest in meaning to

- A. producing
- B. changing
- C. speeding up
- D. smoothing out

#### **Paragraph 4**

Q7 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.

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 year for the

- C. Depletion of the supply of willow and birch twigs causes low birth and growth rates.
- D. The food supply takes two or three years to recover after a peak in hare population density.

### Paragraph 6

Q9 The word “conjunction” in the passage is closest in meaning to

- A. determination
- B. combination
- C. alternation
- D. transformation

Q10 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.

### Paragraph 7

Q12 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 competitors equally.
- D. It happens only when there is a dominant competitor.

quantity of twigs to recover.

What causes the predator-prey oscillations?

Do increasing numbers of hares lead to overharvesting of plants, which in turn results in reduced hare populations, or do increasing numbers of lynx lead to overharvesting of 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 these 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 the 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.” ■

Q13 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 competitors to monopolize the environment's resources.

Where would the sentence best fit? Click on a square to add the sentence to the passage.

Q14 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.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click VIEW NEXT. The relationships between predators and prey are complex.

- 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. Ecologists are interested in studying predator-prey population cycles because understanding how predators and prey interact will allow better wildlife management programs.
- C. Predators help maintain biological diversity by limiting populations of a dominant competitor species, thereby preventing that species from excluding others.
- D. In predator-prey population cycles, predator

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(双壳软体动物) 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 standpoint of diversity, it is usually a mistake to eliminate a major predator from a community.

populations increase or decrease following similar population changes in the species they prey on.

E. 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.

F. The removal of sea stars reduces the diversity of the community in which they are predators, and is therefore a bad idea.

## Listening

Q1 What does the woman go to the information desk?

- A. She does not know where the library computers are located.
- B. She does not know how to use a computer to locate the information she needs.
- C. She does not have time to wait until a library computer becomes available.
- D. The book she is looking for was missing from the library shelf.

Q2 Why does the man assume that the woman is in Professor Simpson's class?

- A. The man recently saw the woman talking with Professor Simpson.
- B. The woman mentioned Professor Simpson's name.
- C. The woman is carrying the textbook used in Professor Simpson's class.
- D. The woman is researching a subject that Professor Simpson specializes in.

Q3 What can be inferred about the geology course the woman is taking?

- A. It has led the woman to choose geology as her major course of study.
- B. It is difficult to follow without a background in chemistry and physics.
- C. The woman thinks it is easier than other science courses.
- D. The woman thinks the course is boring.

Q4 What topic does the woman need information on?

- A. The recent activity of a volcano in New Zealand.
- B. Various types of volcanoes found in New Zealand.
- C. All volcanoes in New Zealand that are still active.
- D. How people in New Zealand have prepared for volcanic eruptions.

Q5 What does the man imply about the article when he says this: 重听题

- A. It may not contain enough background material.
- B. It is part of a series of articles.
- C. It might be too old to be useful.
- D. It is the most recent article published on the subjects.

Q6 What is the lecture mainly about?

- A. The transplantation of young coral to new reef sites.



- B. Efforts to improve the chances of survival of coral reefs.
- C. The effects of temperature change on coral reefs.
- D. Confirming the reasons behind the decline of coral reefs.

Q7 According to the professor, how might researches predict the onset of coral bleaching in the future?

- A. By monitoring populations of coral predators.
- B. By monitoring bleach-resistant coral species.
- C. By monitoring sea surface temperatures.
- D. By monitoring degraded reefs that have recovered.

Q8 What is the professor's opinion about coral transplantation?

- A. It is cost-effective.
- B. It is long-term solution.
- C. It is producing encouraging results.
- D. It does not solve the underlying problems.

Q9 Why does the professor discuss refugia? Click on 2 answers.

- A. To explain that the location of coral within a reef affects the coral's ability to survive
- B. To point out why some coral species are more susceptible to bleaching than others
- C. To suggest that bleaching is not as detrimental to coral health as first thought
- D. To illustrate the importance of studying coral that has a low vulnerability to bleaching

Q10 What does the professor imply about the impact of mangrove forests on coral-reef ecosystems?

- A. Mangrove forests provide habitat for wildlife that feed on coral predators.
- B. Mangrove forests improve the water quality of nearby reefs.
- C. Mangrove forests can produce sediments that pollute coral habitats.
- D. Mangrove forests compete with nearby coral reefs for certain nutrients.

Q11 According to the professor, what effect do lobsters and sea urchins have on a coral reef?

- A. They protect a reef by feeding on destructive organisms.
- B. They harm a reef by taking away important nutrients.
- C. They filter pollutants from water around a reef.
- D. They prevent a reef from growing by prey on young corals.

Q12 What does the professor mainly discuss?

- A. Some special techniques used by the makers of vintage Cremonese violins.
- B. How the acoustical quality of the violin was improved over time.
- C. Factors that may be responsible for the beautiful tone of Cremonese violins.
- D. Some criteria that professional violinists use when selecting their instruments.

Q13 What does the professor imply about the best modern violin makers?

- A. They are unable to recreate the high quality varnish used by Cremonese violins makers.
- B. Their craftsmanship is comparable to that of the Cremonese violins makers.
- C. They use wood from the same trees that were used to make the Cremonese violins.
- D. Many of them also compose music for the violin.

Q14 Why does the professor discuss the growth cycle of trees?

- A. To clarify how modern violin makers select wood.
- B. To highlight a similarity between vintage and modern violins.
- C. To explain why tropical wood cannot be used to make violins.
- D. To explain what causes variations in density in a piece of wood.

Q15 What factor accounts for the particular density differential of the wood used in the Cremonese violins?

- A. The trees that produced the wood were harvested in the spring.
- B. The trees that produced the wood grew in an unusually cool climate.
- C. The wood was allowed to partially decay before being made into violins.
- D. The wood was coated with a local varnish before it was crafted into violins.

Q16 The professor describes an experiment in which wood was exposed to a fungus before being made into a violin. What point does the professor make about the fungus?

- A. It decomposes only certain parts of the wood.
- B. It was found only in the forests of northern Italy.
- C. It was recently discovered in a vintage Cremonese violin.
- D. It decomposes only certain species of trees.

Q17 Why does the professor say this: 重听题

- A. To find out how much exposure students have had to live classical music.
- B. To use student experiences to support his point about audience members.
- C. To indicate that instruments are harder to master than audience members realize.
- D. To make a point about the beauty of violin music.

Q18 Why has the student come to see the professor?

- A. To find out her reaction to a paper he recently submitted.
- B. To point out a factual error in an article the class was assigned to read.
- C. To ask about the suitability of a topic he wants to write about.
- D. To ask about the difference between chinampas and hydroponics.

Q19 What does the professor imply about hydroponics?

- A. It was probably invented by the Aztecs.
- B. It is a relatively modern development in agriculture.
- C. It requires soil that is rich in nutrients.
- D. It is most successful when extremely pure water is used.

Q20 Why does the professor describe how chinampas were made?

- A. To emphasize that the topic selected for a paper needs to be more specific
- B. To encourage the student to do more research
- C. To point out how much labor was required to build chinampas
- D. To explain why crops grown on chinampas should not be considered hydroponic

Q21 What does the professor think about the article the student mentions?

- A. She is convinced that it is not completely accurate.
- B. She believes it was written for readers with scientific backgrounds.
- C. She thinks it is probably too short to be useful to the student.
- D. She has no opinion about it, because she has not read it.

Q22 What additional information does the professor suggest that the student include in his paper?

- A. A comparison of traditional and modern farming technologies
- B. Changes in the designs of chinampas over time
- C. Differences in how various historians have described chinampas
- D. Reasons why chinampas are often overlooked in history books

Q23 What does the professor mainly discuss?

- A. Comparisons between land animals and ocean-going animals of the Mesozoic era.
- B. Comparisons between sauropods and modern animals.
- C. Possible reasons why sauropods became extinct.
- D. New theories about the climate of the Mesozoic era.

Q24 What point does the professor make when she compares blue whales to large land animals?

- A. Like large land animals, blue whales have many offspring.
- B. Like large land animals, blue whales have proportionally small stomachs.
- C. The land environment provides a wider variety of food sources than the ocean.
- D. The ocean environment reduces some of the problems faced by large animals.

Q25 According to the professor, what recent finding about the Mesozoic era challenges an earlier belief?

- A. Sauropod populations in the Mesozoic era were smaller than previously believed.
- B. Oxygen levels in the Mesozoic era were higher than previously believed.
- C. Ocean levels in the Mesozoic era fluctuated more than previously believed.
- D. Plant life in the Mesozoic era was less abundant than previously believed.

Q26 Compared to small animals, what disadvantages do large animals typically have? Click on 2 answers.

- A. Large animals require more food.
- B. Large animals have fewer offspring.
- C. Large animals use relatively more energy in digesting their food.
- D. Large animals have greater difficulty staying warm.

Q27 Why does the professor discuss gastroliths that have been found with sauropod fossils?

- A. To show that much research about extinct animals has relied on flawed methods.
- B. To show that even an incorrect guess can lead to useful research.
- C. To give an example of how fossils discoveries have cast doubt on beliefs about modern animals.
- D. To give an example of a discovery made possible by recent advance in technology.

Q28 What did researchers conclude from their study of sauropods and gastroliths?

- A. That gastroliths probably helped sauropods to store large quantities of plant material in their stomachs.
- B. That sauropods probably used gastroliths to conserve energy.
- C. That sauropods may not have used gastroliths to aid in their digestion.
- D. That sauropods probably did not ingest any stones.

Q29 What is the lecture mainly about?

- A. Various ways color theory is used in different fields.
- B. Various ways artists can use primary colors.
- C. Aspects of color theory that are subject of current research.
- D. The development of the first theory of primary colors.

Q30 What does the professor imply about the usefulness of the theory of primary colors?

- A. It is not very useful to artists.
- B. It has been very useful to scientists.
- C. It is more useful to artists than to psychologists.
- D. It is more useful to modern-day artists than to artists in the past.

Q31 Why does the professor mention Isaac Newton?

- A. To show the similarities between early ideas in art and early ideas in science.
- B. To explain why mixing primary colors does not produce satisfactory secondary colors.
- C. To provide background information for the theory of primary colors.
- D. To point out the first person to propose a theory of primary colors.

Q32 According to the professor, what were the results of Goethe's experiments with color?

Click on 2 answers

- A. The experiments failed to find a connection between colors and emotions.
- B. The experiments showed useful connections between color and light.
- C. The experiments provided valuable information about the relationships between colors.
- D. The experiments were not useful until modern psychologists reinterpreted them.

Q33 According to the professor, why did Runge choose the colors red, yellow, and blue as the three primary colors?

- A. He felt they represented natural light at different times of the day.
- B. He noticed that they were the favorite colors of Romantic painters.

- C. He performed several scientific experiments that suggested those colors.
- D. He read a book by Goethe and agreed with Goethe's choices of colors.

Q34 What does the professor imply when he says this: 重听题

- A. Many people have proposed theories about primary colors.
- B. Goethe discovered the primary colors by accident.
- C. Goethe probably developed the primary color theory before reading Runge's letter.
- D. Goethe may have been influenced by Runge's ideas about primary colors.

## Speaking

Task 1:

Talk about a popular actor, musician, or artist whose work you do not admire. Explain why you do not like this person's work. Use specific details and reasons in your response.

Task 2:

Do you agree or disagree with the following statement?

Parents should be involved in the process of helping their children to choose a university.

Use specific reasons and details in your response.

Task 3: Read an article from the campus newspaper. You will have 50 seconds to read the article.

Begin reading now.

Switch to Electronic Textbooks

The university will begin switching from traditional-bound textbooks to electronic textbooks early next year. University students will be able to download the content of their required textbooks to a reading device and read the material directly from the device's screen. While the cost of the device is around \$200, it is a one-time expense. Considering the rising cost of textbooks, students will save money in the long run since purchasing electronic books for their classes is much less expensive than buying regular textbooks. Furthermore, the university believes the device will be an effective study aid because it is simple to operate and offers features such as highlighting of text and note-taking.

Now listen to two students discussing the article.

The woman expresses her opinion about the university's plan. Briefly summarize the plan then state her opinion and explain the reasons she gives for holding that opinion.

Task 4:

Read a passage from a biology textbook. You will have 50 seconds to read the passage. Begin reading now.

Swarm Intelligence

Some insect species live in large groups, or "swarms." Such swarms typically include several thousand individual insects. Living in swarms allows these insects to accomplish complex tasks together through complex behaviors. The behavior of the insects as a group demonstrates a greater level of complexity than the behavior of individual group members. This complex group behavior is called swarm intelligence. With swarm intelligence, each insect performs a simple instinctual

behavior that is repeated by other individuals that results in a complex behavior. Insect swarms are able to accomplish tasks that individual insects would not be able to achieve.

Now listen to a lecture on this topic in a biology class.

Explain how the example from the lecture illustrates the concept of swarm intelligence.

Task 5:

Listen to a conversation between two English professors.

Briefly summarize the problem the professors are discussing. Then state which of the two solutions from the conversation you would recommend. Explain the reasons for your recommendation.

Task 6:

Listen to part of a lecture in a history class.

Using the examples from the lecture, explain two developments that allowed ancient Roman cities to expand.



## Writing

### TASK 1

The little ice age was a period of usually cold temperature in many parts of the world that lasted from about the year 1350 until 1900.

There were unusually harsh winters, and glaciers grew larger in many areas. Scientists have long wondered what caused the Little Ice Age. Several possible causes have been proposed.

First, the cooling may have been caused by disrupting of ocean currents. Before the Little Ice Age, there was a period of unusually warm weather during which glaciers melted. These melted glaciers sent a large amount of cold freshwater into the Gulf Stream, a large ocean current that strongly affects Earth's climate. Some scientists believe that this freshwater was enough to temporarily disrupt the Gulf Stream. Such a disruption could have caused the Little Ice Age.

Second, volcanic eruption could have caused the Little Ice Age. When volcanoes erupt, they send dark clouds of dust and sulfur gas into the atmosphere. These clouds, which can spread over great areas, block some sunlight from reaching Earth's surface. This can decrease the global temperatures. Scientists know of several volcanic eruptions that took place during the Little Ice Age.

Third, Substantial decreases in human populations may have contributed indirectly to the cooling of the climate. For a variety of reasons (disease, warfare, social disruption), the human population just before the Little Ice Age and during the early part of it was lower than it had been in a long time. Forest trees started growing on fields that were no longer used for agriculture. Since trees absorb carbon dioxide, a greenhouse gas, they decrease the greenhouse effect that keeps Earth warm. With more forest trees absorbing carbon dioxide, Earth became cooler.

**Summarize the points made in the lecture, being sure to explain how they challenged the specific theories presented in the reading passage.**

### TASK 2

Do you agree or disagree with the following statement?

If people have the opportunity to get a secure job, they should take it right away rather than wait for a job that would be more satisfying.

Use specific reasons and examples to support your answer.

