

## Exercise 36

An experiment conducted aboard Space Lab in 1983 was the first attempt to grow protein crystals in the low-gravity environment of space. That experiment is still cited as evidence that growing crystals in microgravity can increase crystal size: the authors reported that they grew lysozyme protein crystals 1,000 times larger than crystals grown in the same device on Earth. Unfortunately, the authors did not point out that their crystals were no larger than the average crystal grown using other, more standard techniques in an Earth laboratory. No research has yet produced results that could justify the enormous costs of producing crystals on a large scale in space. To get an unbiased view of the usefulness of microgravity crystal growth, crystals grown in space must be compared with the best crystals that have been grown with standard techniques on Earth.

(139 words)

1. It can be inferred from the passage that the author would find the Space Lab experiment more impressive if which of the following were true?

- (A) The results of the Space Lab experiment could be replicated in producing other kinds of crystals in addition to lysozyme protein.
- (B) The device used in the experiment produced larger crystals on Earth than it did in space.
- (C) The size of the crystals produced in the experiment exceeded the size of crystals grown in Earth laboratories using standard techniques.
- (D) The cost of producing the crystals in space exceeded that of producing them using standard laboratory techniques.
- (E) The standard techniques used in Earth laboratories were modified in the Space Lab experiment due to the effects of microgravity.

2. Which of the following can be inferred from the passage about the device used to grow crystals in the Space Lab experiment?

- (A) The device is more expensive to manufacture than are the devices used in standard techniques in an Earth laboratory.
- (B) The device has not been used to grow crystals in space since the Space Lab experiment of 1983.

- (C) Crystals grown in the device on Earth tend to be much smaller than crystals grown in it in space.
- (D) Crystals grown in the device in space have been exceeded in size by crystals grown in subsequent experiments in space using other devices.
- (E) The experiments in which the device was used were conducted with proper controls.

An experimental version of the traditional scholarly methods course was designed to raise students' consciousness about the usefulness of traditional learning for any modern critic or theorist. To minimize the artificial aspects of the conventional course, the usual procedure of assigning a large number of small problems drawn from the entire range of historical periods was abandoned, though this procedure has the obvious advantage of at least superficially familiarizing students with a wide range of reference sources. Instead, students were engaged in a collective effort to do original work on a neglected eighteenth-century writer, Elizabeth Griffith, to give them an authentic experience of literary scholarship and to inspire them to take responsibility for the quality of their own work. Griffith's work presented a number of advantages for this particular pedagogical purpose. The body of extant scholarship on Griffith was so tiny that it could all be read in a day. In addition, because Griffith was successful in the eighteenth century, her exclusion from the canon and virtual disappearance from literary history also helped raise issues concerning the current canon.

(179 words)

3. The author of the passage suggests that which of the following is a disadvantage of the strategy employed in the experimental scholarly methods course?

- (A) Students were not given an opportunity to study women writers outside the canon.
- (B) Students' original work would not be appreciated by recognized scholars.
- (C) Little scholarly work has been done on the work of Elizabeth Griffith.
- (D) Most of the students in the course had had little opportunity to study eighteenth-century literature.
- (E) Students were not given an opportunity to encounter certain sources of information that could prove useful in their future studies.

4. It can be inferred that the author of the passage considers traditional scholarly methods courses to be
- (A) irrelevant to the work of most students
  - (B) inconsequential because of their narrow focus
  - (C) unconcerned about the accuracy of reference sources
  - (D) too superficial to establish important facts about authors
  - (E) too wide-ranging to approximate genuine scholarly activity
5. In the context in which it appears, "canon" most nearly means
- A dogma
  - B classic
  - C tour de force
  - D ordinance
  - E tenet

阅读 1:

**译文:**

1983 年在太空实验室里进行的一次实验是在太空的低重力环境下培养蛋白质晶体的第一次尝试。这一实验仍然被当作证据来引用证明在低重力条件下培养晶体可增大晶体的体积:作者报道他们培养的溶菌酶蛋白质晶体比用同样的方法在地球上培植出的大 1000 倍。不幸的是,作者没有指出他们的晶体并不比那些用其他的更标准的技术在地球实验室内培植出的晶体的平均体积大。

仍然还没有什么研究结果能够为在太空培植大量晶体所需的巨大开销提供好的理由。为了得到关于在低重力下培植晶体的用处的客观公正的观点,在太空培植的晶体必须与用最好的技术在地球上培植出的晶体做比较。考虑到进行此类标准实验高额的成本,并且迄今为止实验的前景有限,在这一领域是否该进行进一步的实验都是值得考虑的。



Q1:

从文中可知如果下面哪一项是真实的,作者将会发现太空实验将会更好:

将原文该实验的毛病取非。即:人们没有指出他们的晶体并不比那些用其他的更标准的技术在地球实验室内培植出的晶体的平均体积大。

∴C 正确。实验中培植出的晶体的体积超过了在地球上用标准技术培植出的晶体的体积。

A. 太空实验室的结果可以产生溶菌酶蛋白质晶体以外的其他种晶体。无关。

B. 在地球上的实验用的方法产生了比在太空中实验培植出的更大的晶体。反,削弱了原文。

D. 在太空培植晶体的成本超过了用标准实验室技术培植它们的成本。无关。

E. 由于低重力的影响,用于地球实验室中的标准技术在太空实验室内被修改了。无关。

Q2:

关于在太空实验中用来培植晶体的装置,哪个符合原文?

A. 该装置比在地球实验室内用在标准技术上的装置昂贵。无比较。

B. 自从 1983 年的太空实验室内实验之后这一方法一直没有在太空用于培植晶体。推不出。

C. 正确。用这一装置在地球上培植出的晶体比在太空培植出的晶体小得多。15~7。

D. 用这一装置在太空培植出的晶体在体积上被后来的用其他装置在太空的实验中培植出的晶体超过了。无此比较。

E. 用这一方法做的实验是在适当的控制下进行的。无。

阅读 2:

为解决这些受人关注的问题,一种具有实验性质的关于学习传统治学方法的方案被设计出来,以便提高学生对传统治学法对任一个当代批评家或理论家的用处的理解。为了尽量减少通常课程中的人为因素,一种从所有历史时期全部范围中抽出大量小问题来试图研究的常用方法已经被放弃了,尽管这种方法还是有一个明显的优越性,即至少使学生在表面上熟悉大量的参考资料。作为替代的是,学生们致力于集体研究一位被忽视的 18 世纪作家 E·格里菲斯(Griffith)的原著,以便于使他们有真实的文学研究的体验,并激发他们对自己工作的质量负起责任。

格里菲斯的作品为这一特殊的教学目的提供了一些优越条件。首先,关于格里菲斯的全部的尚存资料所存甚少,以致于一天时间就可以读完;因此,学生几乎没费多少时间就掌握了全部文献的内容,并有了一个明确的领域来进行他们自己的研究。

另外,由于格里菲斯在 18 世纪很成功——正像她连续不断的创作力和当年所受的好评所显示的那样,她如今被排除在经典作家行列之外,并几乎从文学史上消失,这也针对目前的经典作家名录提出了疑问。

**Q3. GRE 出题一般倾向于老缺点或新优点，但是注意该题问的是新缺点：**

此文作者表明下列哪一项是实验性治学方法的不足之处？

将强对比对象“流行做法”的优点取非。L19~21 让步中说：尽管这种方法还是有一个明显的优越性，即至少使学生在表面上熟悉大量的参考资料。

∴ E 正确。学生们没有机会接触他们将来的研究中有用的一些参考资料。

A. 没有给学生一个研究作家名录以外的女作家的机会。

B. 学生们的最初的工作将不会被知名学者赏识。

C. 格里菲斯的作品几乎没有什么学术性的研究工作。

D. 大多数的学生几乎没有机会去研究 18 世纪作品。

均不合。

据此，得到答案：E；

**Q4. 可以定位在老缺点：the usual procedure of assigning a large number of small problems drawn from the entire range of historical periods was abandoned；答案 E；**

**Q5. 可以直接选答案 B；**

**tour de force：绝技；力作；精心杰作；才华横溢；绝招，特技；**

**ordinance：条例；法令；圣餐礼；**

**tenet：宗旨；信条；原则；学说；**

Experiments show that insects can function as pollinators of cycads, rare, palmlike tropical plants. Furthermore, cycads removed from their native habitats—and therefore from insects native to those habitats—are usually infertile. Nevertheless, anecdotal reports of wind pollination in cycads cannot be ignored. The structure of cycads male cones is quite consistent with the wind dispersal of pollen, clouds of which are released from some of the larger cones. The male cone of *Cycas circinalis*, for example, sheds almost 100 cubic centimeters of pollen, most of which is probably dispersed by wind. Furthermore, the structure of most female cycad cones seems inconsistent with direct pollination by wind. Only in the *Cycas* genus are the females' ovules accessible to airborne pollen, since only in this genus are the ovules surrounded by a loose aggregation of megasporophylls rather than by a tight cone.

(141 words)

For the following question, consider each of the choices separately and select all that apply

6. The passage suggests that which of the following is true of the structure of cycad cones?

A The structure of cycad cones provides conclusive

evidence in favor of one particular explanation of cycad pollination.

B The structure of male cycad cones rules out a possible mechanism for cycad pollination that is suggested by the structure of most female cycad cones.

C The structure of male cycad cones is consistent with a certain means of cycad pollination, but that means is inconsistent with the structure of most female cycad cones.

7. The evidence in favor of insect pollination of cycads presented in the second sentence would be more convincing if which of the following were also true?

(A) Only a small variety of cycad species can be successfully transplanted.

(B) Cycads can sometimes be pollinated by means other than wind or insects.

(C) Insects indigenous to regions to which cycads are transplanted sometimes feed on cycads.

(D) Winds in the areas to which cycads are usually transplanted are similar to winds in cycads' native habitats.

(E) The transplantation of cycads from one region to another usually involves the accidental removal and introduction of insects as well.

8. That sales can be increased by the presence of sunlight within a store has been shown by the experience of the only Savefast department store with a large skylight. The skylight allows sunlight into half of the store, reducing the need for artificial light. The rest of the store uses only artificial light. Since the store opened two years ago, the departments on the sunlit side have had substantially higher sales than the other departments.

Which of the following, if true, most strengthens the argument?

(A) On particularly cloudy days, more artificial light is used to illuminate the part of the store under the skylight.

(B) When the store is open at night, the departments in the part of the store under the skylight have sales that are no higher than those of other departments.

(C) Many customers purchase items from



departments in both parts of the store on a single

shopping trip.

(D) Besides the skylight, there are several significant

architectural differences between the two parts of

the store.

(E) The departments in the part of the store under the

skylight are the departments that generally have

the highest sales in other stores in the Savefast

chain.

## 阅读 1:

### 译文:

实验表明,昆虫能够起到苏铁科植物(Cycads)授粉者的作用,苏铁科植物是一些稀少的、类似于棕榈树的热带植物。此外,苏铁科植物一旦离开了原始的生长环境——即离开了原始生长环境中的昆虫——通常是不结果实的。虽然如此,有关苏铁科植物风媒的轶事趣闻报道也是不容忽视的。苏铁科雄性球果的结构很适合花粉风媒,花粉会从较大的球果中被释放出来。例如,卷圈苏铁(Cycas Circinalis)雄性球果会散发出近 100 立方厘米的花粉,其中很大部分可能是由风播散出去的。然而,许多雄性苏铁科植物的球果相对较小,因此,花粉也少得很。此外,大多数苏铁科植物雌性球果的结构似乎与直接的风媒不相符。只有在凤尾松(Cycas)身上,雌性胚球才能得到空气漂浮的花粉,因为只有在此类松树身上,它的胚珠被一堆松散的大叶所环绕,而不是被一个紧裹着的球果所环绕。

### 重点词汇:

cycad ['saikæd] n. 苏铁科裸子植物

shed [ʃed] v. 使流出, 排出, 发出

anecdotal [ænek'dəʊtl] a. 传闻的, 轶事的

ovule ['əʊvju:l] n. (植物)胚珠

cone [kəʊn] n. 球果

### 重要背景:

**苏铁属植物:**裸子植物门,苏铁科的一属。长绿木本植物,树干圆柱型,通常不分叉,髓部大,木质部及韧皮部窄。叶有鳞叶和营养叶二型:鳞叶小,密被褐色毡毛;营养叶集生于茎干顶部,呈棕榈状。雌雄异株,小孢子叶球单生茎干顶端,直立或后渐弯垂;小孢子叶扁平,下面着生多数单室的小孢子囊。小孢子萌发时产生两个带鞭毛能游动的精子。大孢子叶自茎干顶端的鳞叶中生出,聚集成球状,下部成柄状,柄的上部两侧生有 2~10 枚胚珠。种子的外种皮肉质,中种皮骨质,内种皮膜质。苏铁科最初出现于古生代二叠纪,中生代三叠纪至早白垩纪最盛,晚白垩纪剧减,进入新生代更为减少。现存 10 属 110 种,我国仅产苏铁属一属 11 种,分布于台湾、福建南部、广东南部、海南岛、广西南部、贵州南部、云南和四川南部。

苏铁造型美丽,是很好的栽培植物和观赏树种,它的野生数量正在急剧减少,已被列入野生动植物物种保护国际公约中,禁止国际贸易。苏铁科植物成熟晚,移植到北方开花更为困难,所以有“铁树开花”的比喻。干髓的淀粉可供食用,如冷食中的“西米”就是由铁树淀粉制得的。

### 文章结构:

新老观点型。首句:苏铁科虫媒。后转折,风媒也不能忽视。再次转折,风媒的证据缺乏说服力,可能还是虫媒。

### Q6 : C 选项

正确。雄性苏铁科植物球果的结构与一个适当的授粉方式是相合的,但这种方法与大多数雌性苏铁科植物球果的结构是不相合的。该授粉方式指的是风媒,但雌球果不能支持该说法。

### Q7 :

文中 L2~4 所提供的证据,即昆虫是苏铁科植物的授粉者,怎样将会更有说服力?

support 类型的逻辑题。原证据:苏铁科植物脱离原栖息地,即离开那里的昆虫就失去生殖力→它应该是虫媒的。

∴D 正确。苏铁科植物被移植的地区的风通常与其原产地的风很类似。排除了其他因素通过迁移的干扰。

A. 只有一小部分种类的苏铁科植物能成功地被移植。无关。

B. 苏铁科植物有时通过除昆虫和风以外的方法被传粉。无关。

C. 苏铁科植物移植的地区有些昆虫以它们为食。这 weaken 原结论。

E. 苏铁科植物由一个地方到另一个地方的移植通常包括昆虫的一同迁徙和引进。同上, weaken 原结论。

### 阅读 2 :

结论:照射进来的可以刺激销量:

一半人工灯光,一半有阳光 -> 销量高;(文章论据)

一半人工灯光,一半没阳光 -> 销量低;(对论据补充支持)

答案 B;

Influenced by the view of some twentieth-century feminists that women's position within the family is one of the central factors determining women's social position, some historians have underestimated the significance of the woman suffrage movement. These historians contend that nineteenth-century suffragism was less radical and, hence, less important than, for example, the moral reform movement or domestic feminism—two nineteenth-century movements in which women struggled for more power and autonomy within the family. True, by emphasizing these struggles, such historians have broadened the conventional view of nineteenth-century feminism, but they do a historical disservice to suffragism. Nineteenth-century



feminists and anti-feminist alike perceived the suffragists' demand for enfranchisement as the most radical element in women's protest, in part because suffragists were demanding power that was not based on the institution of the family, women's traditional sphere. (135 words)

9. Select the sentence that includes a qualification of the author's critical attitude toward the study of the historians as they are described in the passage.

For the following question, consider each of the choices separately and select all that apply

10. The passage provides information to support which of the following statements about the historians discussed in the passage EXCEPT

- A They rely too greatly on the perceptions of the actual participants in the events they study.
- B Their assessment of the significance of nineteenth-century suffragism differs considerably from that of nineteenth-century feminists.
- C They devote too much attention to nineteenth-century suffragism at the expense of more radical movements that emerged shortly after the turn of the century.

这篇大致思路是：

家庭是女性社会地位的最主要因素，历史学家认为 s 不如 f 深刻重要，因为 s 没有怎么涉及家庭这个观念；事实上，历史学家们扩大了传统观点的对 f 的影响作用，无论是 f 还是 a-f 都认为，s 争取的权利是女权斗争中最厉害的也是最最难以争取的，他们与传统的家庭观念无关，所以历史学家们单单依靠他们没有涉及家庭这个原因否定 s 是不正确的。

9. True, by emphasizing these struggles, such historians have broadened the conventional view of nineteenth-century feminism, but they do a historical disservice to suffragism. 这题貌似比较明显吧。。。注意 qualification，对应 but...

10. These historians contend that nineteenth-century suffragism was less radical and, hence, less important than, for example, the moral reform movement or domestic feminism—two nineteenth-century movements in which women struggled for more power and autonomy within the family. 对应 B 选项

A 貌似没说吧...

C 稍微能找到些比如说对着第二句，但是题干的内容和原文不符。