关于 iBT 黄金 23 篇

俺常常收到同学们的邮件，要我推荐各种各样阅读材料,问我 iBT 的复习资料中 Barron, Longman, Delta 等等哪个更好等等。我其实很无奈---因为尽管这些机构很大牌,但**大牌丝毫都不意味着文章"质量高"(比如你可以想想三鹿奶粉)---**说这些机构的文章质量不高,并不是说文字写得不好,而是说这些文章的**句子结构，论述方式，出题思路**与 ETS 的并不一致(有时候甚至大相径庭)：用这样的材料训练，实在是 事倍功半。

于是，我们实在应该去找找**由 ETS 出的 iBT 文章**来做：（我们能够找到的|由 ETS 编纂的标准 iBT 文章有）

1. OG[1]之中的 10 篇文章；
2. 4 次（套）TPO[2]之中的 3*4=12 篇文章；
3. 早期[3]报名之时 ETS 赠送的 3 篇在线测试题；
4. ETS 官方给出的模考软件之中抽出的 1 篇文章；

于是这个文档在我的一时兴起之下，出现了：

OG 拿在手上，可以一个个字的敲成电子版；**TPO** 的所有考试都是在自己的电脑进行，于是可以一边花钱参加考试,一边截图与录像---再利用截下来的图片，逐个的敲下来；早期的 ETS 赠送的 3 篇**在线测试题**，我也恰好有电子版本；官方的模考软件稍微用点功夫，就能将文章抽出来。虽然工作有些繁杂，但总算完成了所有文章的敲打工作。再花了些时间，把这 23 篇文章都做了答案，附在文章的后面。（由于 TPO 之中有 3 篇文章与 OG 中完全重复,于是减去 3 篇,只剩下 23 篇。）

在这 23 篇由 ETS 出的文章没有做完之前，我们实在不应该花时间在**任何**其他的题目之上。我有时候甚至会对着我的弟兄们高呼："*没有把这 23 篇做 3 遍，你好意思上考场么？你好意思花钱在任何一本~~垃圾~~资料书上面么？*[4]"

另外，如果你正在准备 **iBT-SAT-GRE 的作文部分**或者**写留学文书**，也应该仔细的琢磨一下这些文章：经过 ETS 打磨的文章，无一不是精妙绝伦，极具模仿价值。常常有同学拜托我帮她（他）写 PS，也说起自己的句子怎么看都像是小学生写的（尽管用上了 GRE 里面的单词），于是会随口问我"勇哥，您的写作能力是怎么训练出来的。"我说，"看呗，看呗：托福文章看多了，写作能力自然就提高了。"

"这 ETS 的这些文章真的那么好？"。每当听到这个问题，我都会装做赵本山的样子来一句

"谁用谁知道～～"

你的朋友

文勇

Mail@liuwenyong.com

[1] Official Guide 官方指南，由 ETS 提供的 iBT 考试指南；
[2] TOEFL Practice Online: http://toeflpractice.ets.org/ (由 ETS 提供的，要给 39.5 美刀一次的真题考试)；
[3] 现在报名之后，赠送的是一套 Mini Test， 只有 1 篇文章 13 道题目；
[4] 大家都知道,我是一个温和的人；

iBT 黄金 23 篇[2.5 版[5]]

-2009.01.06

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[5]由于来自官方指南, Applied Arts and Fine Arts 的这篇文章题目不全;

由于 TPO 考试截图的失误，TIMBERLINE VEGETATION ON MOUNTAINS 一文缺少 3、4、5、6、7、8、10、11 题;

目录

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 fluke1 and blowhole2 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 *Pakicefus* 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 *Pakicefus*. 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, *AmbuIocetus* 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

1. Fluke: the two parts that constitute the large triangular tail of a whale
2. "Blowhole: a hole in the top of the head used for breathing

Paragraph 1: 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 fluke3 and blowhole4 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.

Directions: Mark your answer by filling in the oval next to your choice.

1. In paragraph 1, what does the author say about the presence of a blowhole in cetaceans?

○It clearly indicates that cetaceans are mammals.
○It cannot conceal the fact that cetaceans are mammals.
○It is the main difference between cetaceans and land-dwelling mammals.
○It cannot yield clues about the origins of cetaceans.

2. Which of the following can be inferred from paragraph 1 about early sea otters?

○It is not difficult to imagine what they looked like
○There were great numbers of them.
○They lived in the sea only.
○They did not leave many fossil remains.

Paragraph 3: 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.

3. The word precious in the passage is closest in meaning to
○Exact
○Scarce
○Valuable
○Initial

4. Pakicetus and modern cetaceans have similar
○Hearing structures
○Adaptations for diving
○Skull shapes
○Breeding locations

5. The word it in the passage refers to
○Pakicetus
○Fish
○Life
○ocean

Paragraph 4: 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 *Pakicefus*. 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.

6. The word in exposed the passage is closest in meaning to
○Explained
○Visible
○Identified
○Located

7. The hind leg of Basilosaurus was a significant find because it showed that Basilosaurus
○Lived later than Ambulocetus natans
○Lived at the same time as Pakicetus
○Was able to swim well
○Could not have walked on land

8. It can be inferred that Basilosaurus bred and gave birth in which of the following locations
○On land

○Both on land and at sea
○In shallow water
○In a marine environment

Paragraph 5: 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, *AmbuIocetus* 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

9. Why does the author use the word luckily in mentioning that the Ambulocetus natans fossil included hind legs?
○Fossil legs of early whales are a rare find.
○The legs provided important information about the evolution of cetaceans.
○The discovery allowed scientists to reconstruct a complete skeleton of the whale.
○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.
○Even though Ambulocetus swam by moving its body up and down, it did not have a backbone.
○The backbone of Ambulocetus, which allowed it to swim, provides evidence of its missing fluke.
○Although Ambulocetus had no fluke, its backbone structure shows that it swam like modern whales.
○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
○Staying afloat
○Changing direction
○Decreasing weight
○Moving forward

Paragraph 1: 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.

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

This is a question that has puzzled scientists for ages.

Where would the sentence best fit?

○Extinct but already fully marine cetaceans are known from the fossil record. **This is a question that has puzzled scientists for ages.** 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 fossil in northern Pakistan found what proved to be the oldest fossil whale.

○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? **This is a question that has puzzled scientists for ages.** 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.

○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. **This is a question that has puzzled scientists for ages.** 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.

○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. **This is a question that has puzzled scientists for ages.** In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.

13-14. 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 answer choices 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 cetaceanswhales, porpoises, and dolphins.

-
-
-

Answer Choices

1. Recent discoveries of fossils have helped to show the link between land mammals and cetaceans.

2. The discovery of Ambulocetus natans pro-vided evidence for a whale that lived both on land and at sea.

3. The skeleton of Basilosaurusw as found in what had been the Tethys Sea, an area rich in fossil evidence.

4. Pakicetus is the oldest fossil whale yet to be found.

5. Fossils thought to be transitional forms between walking mammals and swimming whales were found.

6. Ambulocetus' hind legs were used for propulsion in the water.

参考答案

1.○It cannot conceal the fact that cetaceans are mammals.

2.○It is not difficult to imagine what they looked like

3.○valuable

4.○Skull shapes

5.○Pakicetus

6.○Visible

7.○Could not have walked on land

8.○In a marine environment

9.○The legs provided important information about the evolution of cetaceans.

10.○Although Ambulocetus had no fluke, its backbone structure shows that it swam like modern whales.

11.○Moving forward

12. ○在 Missing 前添加 **This is a question that has puzzled scientists for ages.**

13-14. ○ 1 2 5

DESERT FORMATION

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 desertlike 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Paragraph 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 desertlike 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.

1. The word threatened in the passage is closest in meaning to
- ○Restricted
- ○Endangered
- ○Prevented
- ○Rejected

Paragraph 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.

2. According to paragraph 3, the loss of natural vegetation has which of the following consequences for soil?

○Increased stony content
○Reduced water absorption
○Increased numbers of spaces in the soil
○Reduced water runoff

Paragraph 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.

3. The word delicate in the passage is closest in meaning to

○Fragile
○Predictable
○Complex
○Valuable

4. According to paragraph 5, in dry periods, border areas have difficulty

○Adjusting to stresses created by settlement
○Retaining their fertility after desertification
○Providing water for irrigating crops
○Attracting populations in search of food and fuel

Paragraph 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.

5. The word progressively in the passage is closest in meaning to

○Openly
○Impressively
○Objectively
○Increasingly

6. According to paragraph 6, which of the following is often associated with raising crops?

○Lack of proper irrigation techniques
○Failure to plant crops suited to the particular area
○Removal of the original vegetation
○Excessive use of dried animal waste

7. The phrase devoid of in the passage is closest in meaning to

○Consisting of
○Hidden by
○Except for
○Lacking in

Paragraph 9: The final major human cause of desertification is soil salinization resulting from over irrigation. 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.

8. According to paragraph9, the ground's absorption of excess water is a factor in desertification because it can

○Interfere with the irrigation of land
○Limit the evaporation of water
○Require more absorption of air by the soil
○Bring salts to the surface

9. All of the following are mentioned in the passage as contributing to desertification EXCEPT

○Soil erosion
○Global warming
○Insufficient irrigation
○The raising of livestock

Paragraph 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.

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.

○Desertification is a significant problem because it is so hard to reverse and affects large areas of land and great numbers of people.

○Slowing down the process of desertification is difficult because of population growth that has spread over large areas of land.

○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.

○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?

○Governments will act quickly to control further desertification.

○The factors influencing desertification occur in cycles and will change in the future.

○Desertification will continue to increase.

○Desertification will soon occur in all areas of the world.

Paragraph 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.■

12. Look at the four squares [■] that indicate where the following sentence can 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?

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

○■The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. **This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing.** 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. ■

○■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 economic reliance on livestock in certain**

regions makes large tracts of land susceptible to overgrazing. This is usually followed by the drying of the soil and accelerated erosion.■

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

13-14. 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 answer choices 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

1. 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.

2. As periods of severe dryness have become more common, failures of a number of different crops have increased.

3. Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable.

4. Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption.

5. Animal dung enriches the soil by providing nutrients for plant growth.

6. Grasses are generally the dominant type of natural vegetation in semiarid lands.

参考答案：

1.○Endangered

2.○Reduced water absorption

3.○Fragile

4.○Adjusting to stresses created by settlement

5.○Increasingly

6.○Removal of the original vegetation

7.○Lacking in

8.○Bring salts to the surface

9.○Insufficient irrigation

10.○Desertification is a significant problem because it is so hard to reverse and affects large areas of land and great numbers of people.

11.○Desertification will continue to increase.

12.○在 The consequences of 前加入 **This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing.**

13-14.○1 3 4

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 Lumiere, 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 1895-1 896, 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.

Paragraph 1: 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).

1. According to paragraph 1, all of the following were true of viewing films in Kinetoscope parlors EXCEPT:

○One individual at a time viewed a film.
○Customers could view one film after another.
○Prizefights were the most popular subjects for films.
○Each film was short.

Paragraph 2: 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.

2. The author discusses phonograph parlors in paragraph 2 in order to

○Explain Edison's financial success
○Describe the model used to design Kinetoscope parlors
○Contrast their popularity to that of Kinetoscope parlors
○Illustrate how much more technologically advanced Kinetoscope parlors were

3. Which of the sentences below best expresses the essential information in the highlighted sentence from the passage?

Incorrect answer choices change the meaning in important ways or leave out essential information.

○Edison was more interested in developing a variety of machines than in developing a technology based on only one.

○Edison refused to work on projection technology because he did not think exhibitors would replace their projectors with newer machines.

○Edison did not want to develop projection technology because it limited the number of machines he could sell.

○Edison would not develop projection technology unless exhibitors agreed to purchase more than one projector from him.

Paragraph 3: 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 Lumiere, 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.

4. The word readily in the passage is closest in meaning to
○Frequently
○Easily
○Intelligently
○Obviously

5. The word assistance in the passage is closest in meaning to
○Criticism
○Leadership
○Help
○Approval

Paragraph 4: With the advent of projection in 1895-1 896, 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.

6. According to paragraph 4, how did the early movies differ from previous spectacles that were presented to large audiences?

○They were a more expensive form of entertainment.
○They were viewed by larger audiences.
○They were more educational.
○They did not require live entertainers.

Paragraph 5: 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.

7. According to paragraph 5, what role did early exhibitors play in the presentation of movies in theaters?

○They decided how to combine various components of the film program.
○They advised film-makers on appropriate movie content.
○They often took part in the live-action performances.
○They produced and prerecorded the material that was shown in the theaters.

Paragraph 6: 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.

8. Which of the following is mentioned in paragraph 6 as one of the ways the Mutoscope differed from the Kinetoscope?

○Sound and motion were simultaneously produced in the Mutoscope.
○More than one person could view the images at the same time with the Mutoscope.
○The Mutoscope was a less sophisticated earlier prototype of the Kinetoscope.
○A different type of material was used to produce the images used in the Mutocope.

9. The word it in the passage refers to

○The advent of projection
○The viewer's relationship with the image
○A similar machine
○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
○Small in size
○Inexpensive to create
○Unfocused
○Limited in subject matter

11. The word expanded in the passage is closest in meaning to
○Was enlarged
○Was improved
○Was varied
○Was rejected

Paragraph 3: ■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 Lumiere, 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.■

12. Look at the four squares [■] that indicate where the following sentence can 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?

○**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."** 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 Lumiere, 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.■

○■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. **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."** About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumiere, 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.■

○■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 Lumiere, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. **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."** 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.■

○■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 Lumiere, 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. **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."**

13-14. 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 answer choices 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

1. Kinetoscope parlors for viewing films were modeled on phonograph parlors.

2. Thomas Edison's design of the Kinetoscope inspired the development of large screen projection.

3. Early cinema allowed individuals to use special machines to view films privately.

4. Slide-and-lantern shows had been presented to audiences of hundreds of spectators.

5. The development of projection technology made it possible to project images on a large screen.

6. Once film images could be projected, the cinema became form of mass consumption.

参考答案：

1.○Prizefights were the most popular subjects for films.

2.○Describe the model used to design Kinetoscope parlors

3.○Edison did not want to develop projection technology because it limited the number of machines he could sell.

4.○Easily

5.○Help

6.○They did not require live entertainers.

7.○They decided how to combine various components of the film program.

8.○A different type of material was used to produce the images used in the Mutocope.

9.○The viewer's relationship with the image

10.○Small in size

11.○Was enlarged

12.○在 a mass audience 后加入 **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."**

13-14.○3 5 6

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 psychobiological 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.

Catharsis: In psychodynamic theory, the purging of strong emotions or the relieving of tensions.

Paragraph 2: 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.

1. According to paragraph 2, what evidence indicates that aggression in animals is related to the hypothalamus?

○Some aggressive animal species have a highly developed hypothalamus.
○Artificial stimulation of the hypothalamus results in aggression in animals.
○Animals behaving aggressively show increased activity in the hypothalamus.
○Animals who lack a hypothalamus display few aggressive tendencies.

Paragraph 3: 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.

2. According to Darwin's theory of evolution, members of a species are forced to struggle for survival because

○Not all individuals are skilled in finding food
○Individuals try to defend their young against attackers
○Many more individuals are born than can survive until the age of reproduction
○Individuals with certain genes are more likely to reach adulthood

Paragraph 5: 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.

3. The word inevitable in the passage is closest in meaning to

○Unavoidable
○Regrettable
○Controllable
○Unsuitable

4. The word gratify in the passage is closest in meaning to

○Identify
○Modify
○Satisfy
○Simplify

5. The word they in the passage refers to

○Future explosions
○Pent-up aggressive impulses
○Outlets
○Indirect ways

6. According to paragraph 5, Freud believed that children experience conflict between a

desire to vent aggression on their parents and

○A frustration that their parents do not give them everything they want

○A fear that their parents will punish them and stop loving them

○A desire to take care of their parents

○A desire to vent aggression on other family members

7. Freud describes people as steam engines in order to make the point that people

○Deliberately build up their aggression to make themselves stronger

○Usually release aggression in explosive ways

○Must vent their aggression to prevent it from building up

○Typically lose their aggression if they do not express it

Paragraph 7: 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.

Paragraph 8: 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.

8. 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.

○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.

○People who believe that aggression is necessary and justified are more likely to act aggressively than those who believe differently.

○People who normally do not believe that aggression is necessary and justified may act aggressively during wartime.

○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

○Moral values

○Previous experiences with aggression

○Instinct to avoid aggression

○Beliefs about other people's intentions

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

○Mistrust

○Misinterpret

○Criticize

○Resent

Paragraph 5: 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.

11. Look at the four squares [■] that indicate where the following sentence can 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?

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

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impulses that have been repressed continue to exist and demand expression. 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.

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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.*

Approach to Understanding Aggression Associated Claims
Biological approach
●
Psychodynamic approach
●
●
Cognitive approach
●
●

Answer choices

1. Aggressive impulses toward people are sometimes expressed in indirect ways.
2. Aggressiveness is often useful for individuals in the struggle for survival.
3. Aggressive behavior may involve a misunderstanding of other people's intentions.
4. The need to express aggressive impulses declines with age.
5. Acting aggressively is the result of a choice influenced by a person's values and beliefs.
6. Repressing aggressive impulses can result in aggressive behavior.

参考答案：

1.○Animals behaving aggressively show increased activity in the hypothalamus.

2.○many more individuals are born than can survive until the age of reproduction

3.○unavoidable

4.○satisfy

5.○pent-up aggressive impulses

6.○a fear that their parents will punish them and stop loving them

7.○must vent their aggression to prevent it from building up

8.○People who believe that aggression is necessary and justified are more likely to act aggressively than those who believe differently.

9.○instinct to avoid aggression

10.○Misinterpret

11.○在 The Freudian perspective 前加入 **According to Freud, however, impulses that have been repressed continue to exist and demand expression.**

12.○2 1 6 3 5

ARTISANS AND INDUSTRIALIZATION

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craft workers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, 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. Craft workers 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 craft workers, 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 185O'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.

Paragraph 1: Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craft workers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. After 181 5 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.

1. Which of the following can be inferred from the passage about articles manufactured before 181 5?

○They were primarily produced by women.
○They were generally produced in shops rather than in homes.
○They were produced with more concern for quality than for speed of production.
○They were produced mostly in large cities with extensive transportation networks.

Paragraph 2: 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.

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.

○Masters demanded moral behavior from apprentices but often treated them

irresponsibly.

○The responsibilities of the master to the apprentice went beyond the teaching of a trade.

○Masters preferred to maintain the trade within the family by supervising and educating the younger family members.

○Masters who trained members of their own family as apprentices demanded excellence from them.

Paragraph 3: 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.

3. The word disrupted in the passage is closest in meaning to

○Prolonged

○Established

○Followed

○Upset

Paragraph 4: 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.

4. In paragraph 4, the author includes the quotation from a mill worker in order to

○Support the idea that it was difficult for workers to adjust to working in factories

○To show that workers sometimes quit because of the loud noise made by factory machinery

○Argue that clocks did not have a useful function in factories

○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

○Freedom
○Status in the community
○Opportunities for advancement
○Contact among workers who were not managers

Paragraph 5: In this newly emerging economic order, workers sometimes organized to protect their rights and traditional ways of life. Craft workers 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 craft workers, 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 185O's, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

6. The phrase gathered some momentum in the passage is closest in meaning to
○Made progress
○Became active
○Caused changes
○Combined forces

7. The word spearheaded in the passage is closest in meaning to
○Led
○Accepted
○Changed
○Resisted

8. Which of the following statements about the labor movement of the 1800's is supported by paragraph 5?
○It was most successful during times of economic crisis.
○Its primary purpose was to benefit unskilled laborers.
○It was slow to improve conditions for workers.
○It helped workers of all skill levels form a strong bond with each other.

Paragraph 6: 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.

9. The author identifies political party loyalties, and disagreements over tactics as two of several factors that

○Encouraged workers to demand higher wages

○Created divisions among workers

○Caused work to become more specialized

○Increased workers' resentment of the industrial system

10. The word them in the passage refers to

○Workers

○Political patty loyalties

○Disagreements over tactics

○Agents of opportunity

Paragraph 1: Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. ■As master craft workers, they imparted the knowledge of their trades to apprentices and journeymen. ■In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. ■After 181 5 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.

11. Look at the four squares ■ that indicate where the following sentence can 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?

○Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. **This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.** As master craft workers, they imparted the knowledge of their trades to apprentices and journeymen. ■In addition, women often worked in their homes part-time, 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.

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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 181 5-1 860 period. *This question is worth 3 points.*

Before 1815	1815-1850
● ●	● ● ●

Answer choices

A united, highly successful labor movement took shape.

Workers took pride in their workmanship.

The income gap between the rich and the poor increased greatly.

Transportation networks began to decline.

Emphasis was placed on following schedules.

Workers went through an extensive period of training.

Few workers expected to own their own businesses.

参考答案：

1.○They were produced with more concern for quality than for speed of production.

2.○The responsibilities of the master to the apprentice went beyond the teaching of a trade.

3.○Upset

4.○support the idea that it was difficult for workers to adjust to working in factories

5.○contact among workers who were not managers

6.○made progress

7.○led

8.○It was slow to improve conditions for workers.

9.○created divisions among workers

10.○Workers

11.○在 Cheap transportation networks 前加入 This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.

12.○Before 1815: 2 6 1815-1850: 3 5 7

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 as 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.

Paragraph 1: 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.

1. The word enhance in the passage is closest in meaning to
○Use
○Improve
○Counteract
○Balance

Paragraph 3: 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.

2. The word they in the passage refers to
○Qualities
○Fins
○Grooves
○Depressions

3. Why does the author mention that Airplanes retract their landing gear while in flight?
○To show that air resistance and water resistance work differently from each other
○To argue that some fishes are better designed than airplanes are

○To provide evidence that airplane engine have studied the design of fish bodies
○To demonstrate a similarity in design between certain fishes and airplanes

Paragraph 4: 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.

4. The word sophisticated in the passage is closest in meaning to
○Complex
○Amazing
○Creative
○Practical

5. According to paragraph4, the long bills of marlins, sailfish, and swordfish probably help these fishes by
○Increasing their ability to defend themselves
○Allowing them to change direction easily
○Increasing their ability to detect odors
○Reducing water resistance as they swim

Paragraph 6: 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.

6. According to the passage, which of the following is one of the reasons that tunas are in constant motion?
○They lack a swim bladder.
○They need to suck in more water than other fishes do.
○They have large muscles for breathing.
○They cannot open their mouths unless they are in motion.

Paragraph 7: 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.

7. 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,
○These fishes often have a problem opening their mouths while swimming.

○The streamlining of these fishes prevents them from slowing down.
○The streamlining of these fishes tends to slow down their breathing.
○Opening the mouth to breathe can reduce the speed of these fishes.

8. The word channel in the passage is closest in meaning to
○Reduce
○Remove
○Direct
○Provide

Paragraph 8: 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.

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
○Swim directly through eddies
○Make efficient use of water currents
○Cover great distances without stopping
○Gain speed by forcing water past their gills

Paragraph 9: 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"Fj. 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.

10. According to paragraph 9, which of the following is true of bluefin tunas?
○Their eyes and brain are more efficient than those of any other fish.
○Their body temperature can change greatly depending on the water temperature.
○They can swim in waters that are much colder than their own bodies.
○They have special muscle tissue that warms their eyes and brain.

Again, supersonic jets have similar features.

Paragraph 6: ■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.

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

Consequently, tunas do not need to suck in water.

Where would the sentence best fit?

○**Consequently, tunas do not need to suck in water.** 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.

○■Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. **Consequently, tunas do not need to suck in water.** 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.

○■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. **Consequently, tunas do not need to suck in water.** 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.

○■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. **Consequently, tunas do not need to suck in water.** 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.

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	INCREASING THRUST
● ● ●	● ●

Features of Fishes

1. The absence of scales from most of the body
2. The ability to take advantage of eddies

3. The ability to feed and reproduce while swimming
4. Eyes that do not protrude
5. Fins that are stiff, narrow, and smooth
6. The habit of swimming with the mouth open
7. A high, narrow tail with swept-back tips

参考答案

1. ○improve
2. ○Fins
3. ○To demonstrate a similarity in design between certain fishes and airplanes
4. ○Complex
5. ○Reducing water resistance as they swim
6. ○They lack a swim bladder.
7. ○Opening the mouth to breathe can reduce the speed of these fishes.
8. ○Direct
9. ○make efficient use of water currents
10. ○They can swim in waters that are much colder than their own bodies.
11. ○在 Accordingly 前加入 **Consequently, tunas do not need to suck in water.**
12. ○Reducing Water Resistance: 1 4 5; Increasing Thrust 2 7

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' 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.

Paragraph 1: 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.

1. The word immeasurably in the passage is closest in meaning to

○Frequently
○Greatly
○Rapidly
○Reportedly

2. According to paragraph 1, the presidency of Andrew Jackson was especially significant for which of the following reasons?

○The President granted a portion of his power to the Senate.
○The President began to address the Senate on a regular basis.
○It was the beginning of the modern presidency in the United States.
○It was the first time that the Senate had been known to oppose the President.

Paragraph 2: 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.

3. The author mentions bankers and investors in the passage as an example of which of the following?

○The Democratic Party's main source of support
○The people that Democrats claimed were unfairly becoming rich
○The people most interested in a return to a simple agrarian republic
○One of the groups in favor of Andrew Jackson's presidency

Paragraph 3: 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.

4. According to paragraph 3, Whigs believed that commerce and economic development would have which of the following effects on society?

○They would promote the advancement of society as a whole.
○They would cause disagreements between Whigs and Democrats
○They would supply new positions for Whig Party members.
○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?

○To regulate the continuing conflict between farmers and businesspeople
○To restrict the changes brought about by the market
○To maintain an economy that allowed all capable citizens to benefit
○To reduce the emphasis on economic development

Paragraph 4: 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' 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.

6. The word inclination in the passage is closest in meaning to

○Argument
○Tendency
○Example
○Warning

7. According to paragraph 4, a Democrat would be most likely to support government action in which of the following areas?

○Creating a state religion
○Supporting humanitarian legislation
○Destroying monopolies
○Recommending particular moral beliefs

Paragraph 5: 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.

8. The word concept in the passage is closest in meaning to

○Power
○Reality
○Difficulty
○Idea

9. Which of the following can be inferred from paragraph 5 about variations in political beliefs within the Whig Party?

○They were focused on issues of public liberty.
○They caused some members to leave the Whig party.
○They were unimportant to most Whigs.
○They reflected regional interests.

Paragraph 6: 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.

10. According to paragraph 6, the Democrats were supported by all of the following groups EXCEPT

○workers unhappy with the new industrial system

○planters involved in international trade

○rising entrepreneurs

○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.

○Whigs were able to attract support only in the wealthiest parts of the economy because Democrats dominated in other areas.

○Whig and Democratic areas of influence were naturally split between urban and rural areas, respectively.

○The semisubsistence farming areas dominated by Democrats became increasingly isolated by the Whigs' control of the market economy.

○The Democrats' power was greatest in poorer areas while the Whigs were strongest in those areas where the market was already fully operating.

Paragraph 2: 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.

12. Look at the four squares II that indicate where the following sentence can 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?

○During Jackson's second term, his opponents had gradually come together to form the Whig party. **This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy.** 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.

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banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. **This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy.** 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.

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 answer choices 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.

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Answer Choices

1. The Democratic and Whig Parties developed in response to the needs of competing economic and political constituencies.

2. During Andrew Jackson's two terms as President, he served as leader of both the Democratic and Whig Parties.

3. The Democratic Party primarily represented the interests of the market, banks, and commerce.

4. In contrast to the Democrats, the Whigs favored government aid for education.

5. A fundamental difference between Whigs and Democrats involved the importance of the market in society.

6. The role of government in the lives of the people was an important political distinction between the two parties.

参考答案：

1. ○Greatly
2. ○It was the beginning of the modern presidency in the United Stales.
3. ○The people that Democrats claimed were unfairly becoming rich
4. ○They would promote the advancement of society as a whole.
5. ○To maintain an economy that allowed all capable citizens to benefit
6. ○Tendency
7. ○Destroying monopolies
8. ○Idea
9. ○They reflected regional interests.

10. ○planters involved in international trade

11. ○The Democrats' power was greatest in poorer areas while the Whigs were strongest in those areas where the market was already fully operating.

12. ○在 Whigs and Democrats 前加 **This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy.**

13. ○1 5 6

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.

Paragraph 1: 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.

1. The word despondent in the passage is closest in meaning to

○Curious
○Unhappy
○Thoughtful
○Uncertain

2. The author mentions "Baring the teeth in a hostile way" in order to

○Differentiate one possible meaning of a particular facial expression from other meanings of it
○Support Darwin's theory of evolution
○Provide an example of a facial expression whose meaning is widely understood
○Contrast a facial expression that is easily understood with other facial expressions

Paragraph 2: 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.

3. The word concur in the passage is closest in meaning to

○Estimate
○Agree
○Expect
○Understand

4. The word them in the passage refers to

○Emotions
○People
○Photographs
○Cultures

5. According to paragraph 2, which of the following was true of the Fore people of New Guinea?

○They did not want to be shown photographs.
○They were famous for their story-telling skills.
○They knew very little about Western culture.
○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.

○The Fore's facial expressions indicated their unwillingness to pretend to be story characters.

○The Fore were asked to display familiar facial expressions when they told their stories.

○The Fore exhibited the same relationship of facial expressions and basic emotions that is seen in Western culture when they acted out stories.

○The Fore were familiar with the facial expressions and basic emotions of characters in stories.

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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?

7. According to the passage, what did Darwin believe would happen to human emotions that were not expressed?

○They would become less intense.
○They would last longer than usual.
○They would cause problems later.
○They would become more negative

Paragraph 4: 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.

8. According to the passage, research involving which of the following supported the facial-feedback hypothesis?

○The reactions of people in experiments to cartoons
○The tendency of people in experiments to cooperate
○The release of neurotransmitters by people during experiments
○The long-term effects of repressing emotions

9. The word rate in the passage is closest in meaning to

○Judge
○Reject
○Draw
○Want

Paragraph 6: 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.

10. The word relevant in the passage is closest in meaning to

○Contradictory
○Confusing
○Dependent
○Applicable

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

○It first suppresses stress, then intensifies it.

○It may cause fear and tension in those who see it.
○It can damage the lip muscles.
○It may either heighten or reduce emotional response.

Paragraph 2: ■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.

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?

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

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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.

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Answer Choices

1. Artificially producing the Duchenne smile can cause a person to have pleasant feelings.

2. Facial expressions and emotional states interact with each other through a variety of feedback mechanisms.

3. People commonly believe that they can control their facial expressions so that their true emotions remain hidden.

4. A person's facial expression may reflect the person's emotional state.

5. Ekman argued that the ability to accurately recognize the emotional content of facial expressions was valuable for human beings.

6. Facial expressions that occur as a result of an individual's emotional state may themselves feed back information that influences the person's emotions.

参考答案：

1. ○Unhappy

2. ○provide an example of a facial expression whose meaning is widely understood

3. ○Agree

4. ○Photographs

5. ○They knew very little about Western culture.

6. ○The Fore exhibited the same relationship of facial expressions and basic emotions that is seen in Western culture when they acted out stories.

7. ○They would become less intense.

8. ○The reactions of people in experiments to cartoons

9. ○Judge

10. ○Applicable

11. ○It may either heighten or reduce emotional response.

12.○在 In classic research 前加 **This universality in the recognition of emotions was demonstrated by using rather simple methods.**

13. ○2 4 6

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.

Paragraph 1: 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.

1. According to paragraph 1, which of the following statements is true of changes in Earth's landscape?

○They occur more often by uplift than by erosion
○They occur only at special times.
○They occur less frequently now than they once did.
○They occur quickly in geological terms.

2. The word relatively in the passage is closest in meaning to

○Unusually
○Comparatively
○Occasionally
○Naturally

Paragraph 2: 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.

3. Which of the following can be inferred from paragraph 2 about the mountains of the Himalayas?

○Their current height is not an indication of their age.
○At present, they are much higher than the mountains of the Caledonian range.
○They were a uniform height about 400 million years ago.

○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
○Resemblances
○Regions
○Remains
○Restorations

Paragraph 3: 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.

5. According to paragraph 3, one cause of mountain formation is the
○effect of climatic change on sea level
○slowing down of volcanic activity
○force of Earth's crustal plates hitting each other
○replacement of sedimentary rock with volcanic rock

Paragraph 5: 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.

6. Why does the author mention Carbon dioxide in the passage?
○To explain the origin of a chemical that can erode rocks
○To contrast carbon dioxide with carbonic acid
○To give an example of how rainwater penetrates soil
○To argue for the desirability of preventing erosion

7. The word seeps in the passage is closest in meaning to
○Dries gradually
○Flows slowly
○Freezes quickly
○Warms slightly

Paragraph 6: 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.

8. The word them in the passage refers to

○Cold areas

○Masses of ice

○Valleys

○Rock debris

Paragraph 2: 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.

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.

○When they are relatively young, hills and mountains successfully resist the destructive forces of nature.

○Although they seem permanent, hills and mountains exist for a relatively short period of geological time.

○Hills and mountains successfully resist the destructive forces of nature, but only for a short time.

○Hills and mountains resist the destructive forces of nature better than other types of landforms.

Paragraph 6: 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.

10. According to paragraph 6, which of the following is both a cause and result of erosion?

○Glacial activity

○Rock debris

○Tree roots

○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?

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

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

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

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

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	DESTRUCTIVE PROCESSSES
• • •	• •

Answer Choices:
Collision of Earth's crustal plates
Separation of continents
Wind-driven sand
Formation of grass roots in soil
Earthquakes
Volcanic activity
Weather processes

参考答案:

1. ○They occur quickly in geological terms.
2. ○Comparatively
3. ○At present, they are much higher than the mountains of the Caledonian range.
4. ○Remains
5. ○Force of Earth's crustal plates hitting each other
6. ○To explain the origin of a chemical that can erode rocks
7. ○Flows slowly
8. ○Masses of ice
9. ○Although they seem permanent, hills and mountains exist for a relatively short period of geological time.
10. ○Sand
11. ○在 In dry areas 前加 **Under different climatic conditions, another type of destructive force contributes to erosion.**
12. ○Constructive processes 1 5 6; Destructive processes 3 7

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.

Paragraph 1: 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.

1. Which of the following can be inferred from paragraph 1 about the ground that we walk on?

○It cannot hold rainwater for long periods of time.
○It prevents most groundwater from circulating.
○It has the capacity to store large amounts of water.
○It absorbs most of the water it contains from rivers.

2. The word "incredible" in the passage is closest in meaning to

○Confusing
○Comforting
○Unbelievable
○Interesting

Paragraph 2: 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.

3. The word "out of sight" in the passage is closest in meaning to
○Far away
○Hidden
○Partly visible
○Discovered

4. According to paragraph 2, where is groundwater usually found?
○Inside pieces of sand and gravel
○On top of beds of rock
○In fast rivers that are flowing beneath the soil
○In spaces between pieces of sediment

5. The phrase "glacial outwash" in the passage refers to
○Fast rivers
○Glaciers
○The huge volumes of water created by glacial melting
○The particles carried in water from melting glaciers.

Paragraph 3: 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.

6. All of the following are mentioned in paragraph 3 as places that sediment-laden rivers can deposit their sediments EXCEPT
○A mountain valley
○Flat land
○A lake floor
○The seafloor

Paragraph 4: 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.

7. The word "overlie" in the passage is closest in meaning to
○Cover
○Change
○Separate

○Surround

Paragraph 5: 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.

8. The phrase "so much for" in the passage is closest in meaning to
○That is enough about
○Now let us turn to
○Of greater concern are
○This is related to

9. The word "plugged" in the passage is closet in meaning to
○Washed
○Dragged
○Filled up
○Soaked through

Paragraph 6: 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.

Paragraph 7: 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.

10. According to paragraphs 6 and 7, why is basalt unlike most crystalline forms of rock?
○It is unusually solid
○It often has high porosity.
○It has a low proportion of empty space.
○It is highly permeable.

11. What is the main purpose of paragraph 7?
○To explain why water can flow through rock
○To emphasize the large amount of empty space in all rock
○To point out that a rock cannot be both porous and permeable
○To distinguish between two related properties of rock

Paragraph 9: 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.

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.

○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.

○Water in rocks is held in place by large pores and drains away from small size pores through surface tension.

○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.

○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.

Paragraph 8: 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.■

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

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

○Sediments that hold water were spread by glaciers and are still spread by rivers and streams.

○Water is stored underground in beds of loose sand and gravel or in cemented sediment.

○The size of a saturated rock's pores determines how much water it will retain when the rock is put in a dry place.

○Groundwater often remains underground for a long time before it emerges again.

○Like sandstone, basalt is a crystalline rock that is very porous.

○Beds of unconsolidated sediments are typically located at inland sites that were once underwater.

参考答案

1. ○It has the capacity to store large amounts of water.
2. ○Unbelievable
3. ○Hidden
4. ○Inside pieces of sand and gravel
5. ○The particles carried in water from melting glaciers.
6. ○A mountain valley
7. ○Cover
8. ○That is enough about
9. ○Filled up
10. ○It often has high porosity.
11. ○To distinguish between two related properties of rock
12. ○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.
13. ○4
14. ○1 2 3

THE OIGINS 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 ate 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.

Paragraph 1: 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.

1. The word “championed” in the passage is closest in meaning to
○Changed
○Debated
○Created
○Supported

2. The word “attributes” in the passage is closest in meaning to
○Ascribes
○Leaves
○Limits
○Contrasts

3. According to paragraph 1, theories of the origins of theater
○Are mainly hypothetical

○Are well supported by factual evidence
○Have rarely been agreed upon by anthropologists
○Were expressed in the early stages of theater's development

4. According to paragraph 1, why did some societies develop and repeat ceremonial actions?
○To establish a positive connection between the members of the society
○To help society members better understand the forces controlling their food supply
○To distinguish their beliefs from those of other societies
○To increase the society's prosperity

Paragraph 2 :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.

5. The word "this" in the passage refers to
○The acting out of rites
○The divorce of ritual performers from the rest of society
○The separation of myths from rites
○The celebration of supernatural forces

6. The word "autonomous" in the passage is closest in meaning to
○Artistic
○Important
○Independent
○Established

7. According to paragraph 2, what may cause societies to abandon certain rites?
○Emphasizing theater as entertainment
○Developing a new understanding of why events occur.
○Finding a more sophisticated way of representing mythical characters
○Moving from a primarily oral tradition to a more written tradition

Paragraph 5 :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.

8. All of following are mentioned in paragraph 5 as possible reasons that led societies to develop theater EXCEPT:

○Theater allows people to face that they are afraid of.
○Theater gives an opportunity to imagine a better reality.
○Theater is a way to enjoy imitating other people.
○Theater provides people the opportunity to better understand the human mind.

9. Which of the following best describes the organization of paragraph 5?

○The author presents two theories for a historical phenomenon.
○The author argues against theories expressed earlier in the passage.
○The author argues for replacing older theories with a new one.
○The author points out problems with two popular theories.

Paragraph 6: 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.

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

○Compromise
○Inclination
○Tradition
○Respect

11. Why does the author mention “comedy”?

○To give an example of early types of theater
○To explain how theater helps a society respond to threats to its welfare
○To help explain why detachment is needed for the development of theater
○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 society's rites were more likely to be retained in the oral tradition if its myths were admired for artistic qualities.

○The artistic quality of a myth was sometimes an essential reason for a society to abandon it from the oral tradition.

○Some early societies stopped using myths in their religious practices when rites ceased to be seen as useful for social well-being.

○Myths sometimes survived in a society's tradition because of their artistic qualities even after they were no longer deemed religiously beneficial.

Paragraph 3:■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.

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

To enhance their listener's enjoyment, storytellers continually make their stores more engaging and memorable.

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

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

○The presence of theater in almost all societies is thought to have occurred because early story tellers traveled to different groups to tell their stores.

○Many theorists believe that theater arises when societies act out myths to preserve social well-being.

○The more sophisticated societies became, the better they could influence desirable

occurrences through ritualized theater.

○Some theories of theater development focus on how theater was used by group leaders to group leaders govern other members of society.

○Theater may have come from pleasure humans receive from storytelling and moving rhythmically.

○The human capacities for imitation and fantasy are considered possible reasons why societies develop theater.

参考答案：

1. ○Supported
2. ○Ascribes
3. ○Are mainly hypothetical
4. ○To increase the society's prosperity
5. ○The separation of myths from rites
6. ○Independent
7. ○Developing a new understanding of why events occur.
8. ○Theater provides people the opportunity to better understand the human mind.
9. ○The author presents two theories for a historical phenomenon.
10. ○Inclination
11. ○To help explain why detachment is needed for the development of theater
12. ○Myths sometimes survived in a society's tradition because of their artistic qualities even after they were no longer deemed religiously beneficial.
13. ○在 Thus 前加 To enhance their listener's enjoyment, storytellers continually make their stores more engaging and memorable.
14. ○2 5 6

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.

Paragraph 1: 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.

1. The word "dramatic" in the passage is closest in meaning to
○Gradual
○Complex
○Visible
○Striking

2. Which is the lower timberline mentioned in paragraph 1 likely to be found?
○In an area that has little water
○In an area that has little sunlight
○Above a transition area
○On a mountain that has on upper timberline.

Paragraph 4: 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.

3. Which of the sentences below best express the essential information in the highlighted sentence in the passage? In correct choices change the meaning in important ways or leave

out essential information.

○Because of their deformed shapes at high altitudes, trees are not likely to be seriously harmed by the strong winds typical of those altitudes.

○As altitude increases, the velocity of winds increase, leading to a serious decrease in the number of trees found at high altitudes.

○The deformed shapes of trees at high altitudes show that wind velocity, which increase with altitude, can cause serious hardship for trees.

○Increased wind velocity at high altitudes deforms the shapes of trees, and this may cause serious stress for trees.

Paragraph 6：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.

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

○Because they are low, they are less exposed to strong winds.

○Because they are low, the winter snow cover gives them more protection from the extreme cold.

○In the equatorial mountains, they tend to be lower than in mountains elsewhere.

○Their low growth form keeps them closer to the ground, where there is more heat than further up.

Paragraph 5：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.■

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

6. 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

○Birch is one of the few species of tree that can survive in the extreme environments of the upper timberline.

○There is no agreement among scientists as to exactly why plant growth is sharply different above and below the upper timberline.

○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.

○The geographical location of an upper timberline has an impact on both the types of trees found there and their physical characteristics.

○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.

○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.

参考答案：

1. ○Striking
2. ○In an area that has little water
3. ○The deformed shapes of trees at high altitudes show that wind velocity, which increase with altitude, can cause serious hardship for trees.
4. ○In the equatorial mountains, they tend to be lower than in mountains elsewhere.
5. ○在 melt small snowdrifts 后加 This explains how, for example, alpine cushion plants have been found growing at an altitude of 6,180 meters.
6. ○2 4 6

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 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, 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 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.

Paragraph 1: 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.

1. According to paragraph 1, all of the following statements about architecture are true EXCEPT:

○Architecture is visual art.
○Architecture reflects the cultural values of its creators.
○Architecture has both artistic and scientific dimensions.
○Architecture has an indirect effect on life.

Paragraph 2: 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.

2. The word "feasible" in the passage is closet in meaning to

○In existence
○Without question
○Achievable

○Most likely

Paragraph 3：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.

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.

○Unchanging physical laws have limited the size and strength of buildings that can be made with materials discovered long ago.

○Building materials have changed in order to increase architectural size and strength, but physical laws of structure have not changed.

○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.

○Unlike building materials, the methods of support used in architecture have not changed over time because they are based on physical laws.

4. The word "devised" in the passage is closest in meaning to

○Combined

○Created

○Introduced

○Suggested

Paragraph 4：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 ago.

5. The word "integral" is closet in meaning to

○Essential

○Variable

○Practical

○Independent

6. According to paragraph 4, which of the following is true about materials used in the construction of buildings?

○Because new building materials are hard to find, construction techniques have changed very little from past generations.

○The availability of suitable building materials no longer limits the types of structures that may be built.

○The primary building materials that are available today are wood, stone, and brick.

○Architects in earlier times did not have enough building materials to enclose large spaces.

7. In paragraph 4, what does the author imply about modern buildings?

○They occupy much less space than buildings constructed one hundred years ago.

○They are not very different from the building of a few generations ago.

○The weigh less in relation to their size than buildings constructed one hundred years ago.

○They take a long time to build as a result of their complex construction methods.

Paragraph 5: 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, 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.

8. Which of the following correctly characterizes the relationship between the human body and architecture that is described in paragraph5?

○Complex equipment inside buildings is the one element in modern architecture that resembles a component of the human body.

○The components in early buildings were similar to three particular elements of the human body.

○Modern buildings have components that are as likely to change as the human body is.

○In general, modern buildings more closely resemble the human body than earlier buildings do.

Paragraph 6: 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 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.

9. The word "arduous" in the passage is closest in meaning to

○Difficult

○Necessary

○Skilled

○Shared

10. Why does the author include a description of how the "doorways and windows" of Machu Picchu were constructed?

○To indicate that the combined skeletons and skins of the stone buildings of Machu Picchu were similar to igloos and adobe structures

○To indicate the different kinds of stones that had to be cut to build Machu Picchu

○To provide an illustration of the kind of construction that was required before arches were invented

○To explain how ancient builders reduced the amount of time necessary to construct buildings from stone.

11. According to paragraph6, which of the following statements is true of the arch?

○The Romans were the first people to use the stone arch.

○The invention of the arch allowed new architectural forms to be developed.

○The arch worked by distributing the structural of a building toward the center of the arch.

○The Romans followed earlier practices in their use of arches.

Paragraph 5: ■ 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, 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. ■

12. 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 concreter or air-inflated structures, are again unifying skeleton and skin.

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

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.

Architecture uses forms and space to express cultural values.

-
-
-

Answer choices

Architects seek to create buildings that are both visually appealing and well suited for human use.

○Over the course of the history of building, innovations in material and methods of construction have given architects ever greater freedom to express themselves.

○Throughout history buildings have been constructed like human bodies, needing distinct “organ” systems in order to function.

○Both clients and architects are responsible for the mediocre designs of some modern buildings.

○Modern buildings tend to lack the beauty of ancient stone buildings such as those of Machu Picchu.

○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：

1. ○Architecture has an indirect effect on life.

2. ○Achievable

3. ○Unlike building materials, the methods of support used in architecture have not changed over time because they are based on physical laws.

4. ○Created

5. ○Essential

6. ○The availability of suitable building materials no longer limits the types of structures that may be built.

7. ○The weigh less in relation to their size than buildings constructed one hundred years ago.

8. ○In general, modern buildings more closely resemble the human body than earlier buildings do.

9. ○Difficult

10. ○To provide an illustration of the kind of construction that was required before arches were invented

11. ○The arch worked by distributing the structural of a building toward the center of the arch.

12. ○在 skin were often one 后加 **However, some modern architectural designs, such as those using folded plates of concreter or air-inflated structures, are again unifying skeleton and skin.**

13. ○1 2 6

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 1880's. 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 1930's. The ensuing rapid expansion of irrigation agriculture, especially from the 1950's 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 1930's, 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. Other, 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 are 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.

Paragraph 1: The vast grasslands of the High Plains in the central United States were settled by farmers and ranchers in the 1880's. 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.

1. According to paragraph 1, which of the following statements about the High Plains is true?

○Until farmers and ranchers settled there in the 1880's, the High Plains had never been inhabited.

○The climate of the High Plains is characterized by higher-than-average temperatures.

○The large aquifer that lies underneath the High Plains was discovered by the Ogallala Sioux Indians.

○Before the early 1900's there was only a small amount of farming and ranching in the High Plains.

Paragraph 2: 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.

2. According to paragraph 2, all of the following statements about the Ogallala aquifer are true EXCEPT:

○The aquifer stretches from South Dakota to Texas.

○The aquifer's water comes from underground springs.

○Water has been gathering in the aquifer for 30,000 years.

○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.

○Despite the current impressive size of the Ogallala aquifer, the region's climate keeps the rates of water addition very small.

○Although the aquifer has been adding water at the rate of only half a centimeter a year, it will eventually accumulate enough water of fill Lake Huron.

○Because of the region's present climatic conditions, water is being added each year to the aquifer.

○Even when the region experiences unfortunate climatic conditions, the rates of addition of water continue to increase.

Paragraph 3: The first wells were drilled into the Ogallala during the drought years of the early 1930's. The ensuing rapid expansion of irrigation agriculture, especially from the 1950's 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.

4. The word "ensuing" in the passage is closest in meaning to

○Continuing

○Surprising

○Initial

○Subsequent

5. In paragraph 3, why does the author provide the information that 40 percent of American cattle are fattened in the High Plains?

○To suggest that crop cultivation is not the most important part of the economy of the High Plains

○To indicate that not all economic activity in the High Plains is dependent on irrigation

○To provide another example of how water from the Ogallala has transformed the economy of the High Plains

○To contrast cattle-fattening practices in the High Plains with those used in other region of the United States

Paragraph 4: 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 1930's, 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.

6. The word "unprecedented" in the passage is closest in meaning to
- ○Difficult to control
- ○Without any restriction
- ○Unlike anything in the past
- ○Rapidly expanding

7. The word "virtually" in the passage is closest in meaning to
- ○Clearly
- ○Perhaps
- ○Frequently
- ○Almost

8. According to paragraph 4, all of following are consequences of the heavy use of the Ogallala aquifer for irrigation EXCEPT:
- ○The recharge rate of the aquifer is decreasing.
- ○Water tables in the region are becoming increasingly lower.
- ○Wells now have to be dug to much greater depths than before.
- ○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
- ○Has the greatest amount of farmland being irrigated with Ogallala water
- ○Contains the largest amount of Ogallala water underneath the soil
- ○Is expected to face the worst water supply crisis as the Ogallala runs dry
- ○Uses the least amount of Ogallala water for its irrigation needs

Paragraph 5: 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. Other, 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.

10. The word "inevitable" in the passage is closest in meaning to
- ○Unfortunate

○Predictable
○Unavoidable
○Final

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

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

Paragraph 6: 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 are 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.

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

○The rivers cannot supply sufficient water for the farmer's needs.
○Increased irrigation costs would make the products too expensive.
○The costs of using capillary water for irrigation will increase.
○Farmers will be forced to switch to genetically engineered crops.

Paragraph 5—6: 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.■ Other, 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 are 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.

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

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

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-
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Answer choices

○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.

○Given the aquifer's low recharge rate, its use for irrigation is causing water tables to drop and will eventually lead to its depletion.

○Releasing capillary water and introducing drought-resistant crops are less-promising solutions to the water supply crisis than bringing in river water

○The periodic deepening of wells and the use of more-powerful pumps would help increase the natural recharge rate of the Ogallala.

○In Texas, a great deal of attention is being paid to genetic engineering because it is there that the most critical situation exists.

○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:

1. ○Before the early 1900's there was only a small amount of farming and ranching in the High Plains.

2. ○The aquifer's water comes from underground springs.

3. ○Despite the current impressive size of the Ogallala aquifer, the region's climate keeps

the rates of water addition very small.

4. ○Subsequent

5. ○To provide another example of how water from the Ogallala has transformed the economy of the High Plains

6. ○Unlike anything in the past

7. ○Almost

8. ○The recharge rate of the aquifer is decreasing.

9. ○Is expected to face the worst water supply crisis as the Ogallala runs dry

10. ○Unavoidable

11. ○Farmers who grow crops that need a lot of water make higher profits.

12. ○Increased irrigation costs would make the products too expensive.

13. ○4

14. ○1 2 6

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 of 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.

Paragraph 1: 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.

1. The word "particular" in the passage is closest in meaning to
○Natural
○Final
○Specific
○Complex

2. According to paragraph 1, which of the following is NOT true of climax communities?
○They occur at the end of a succession.
○They last longer than any other type of community.
○The numbers of plants in them and the mix of species do not change
○They remain stable for at least 500 years at a time.

Paragraph 2: 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.

3. According to paragraph 2, which of the following principles of ecosystems can be learned by studying a pond?

○Ecosystem properties change more slowly than individuals in the system.
○The stability of an ecosystem tends to change as individuals are replaced.
○Individual organisms are stable from one year to the next.
○A change in the numbers of an organism does not affect an ecosystem's properties

Paragraph 3: 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 of pests.

4. According to paragraph 3, ecologists once believed that which of the following illustrated the most stable ecosystems?
○Pioneer communities
○Climax communities
○Single-crop farmlands
○Successional plant communities

Paragraph 4: 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.

5. According to paragraph 4, why is the question of ecosystem stability complicated?
○The reasons for ecosystem change are not always clear.
○Ecologists often confuse the word "stability" with the word "resilience."
○The exact meaning of the word "stability" is debated by ecologists.
○There are many different answers to ecological questions.

6. According to paragraph 4, which of the following is true of climax communities?
○They are more resilient than pioneer communities.
○They can be considered both the most and the least stable communities.
○They are stable because they recover quickly after major disturbances.
○They are the most resilient communities because they change the least over time.

Paragraph 5: 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.)

7. Which of the following can be inferred from paragraph 5 about redwood forests?

○They become less stable as they mature.

○They support many species when they reach climax.

○They are found in temperate zones.

○They have reduced diversity during mid-successional stages.

8. The word "guarantee" in the passage is closest in meaning to

○Increase

○Ensure

○Favor

○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)"?

○To illustrate a general principle about the stability of systems by using an everyday example

○To demonstrate that an understanding of stability in ecosystems can be applied to help understand stability in other situations

○To make a comparison that supports the claim that, in general, stability increases with diversity

○To provide an example that contradicts mathematical models of ecosystems

Paragraph 6: 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.

10. The word "pales" in the passage is closest in meaning to

○Increases proportionally

○Differs

○Loses significance

○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.

○Ecologists now think that the stability of an environment is a result of diversity rather than patchiness.

○Patchy environments that vary from place to place do not often have high species diversity.

○Uniform environments cannot be climax communities because they do not support as many types of organisms as patchy environments.

○A patchy environment is thought to increase stability because it is able to support a wide variety of organisms.

Paragraph 7: 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.

12. The word "adjacent" in the passage is closest in meaning to

○Foreign

○Stable

○Fluid

○Neighboring

Paragraph 6: ■ 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. ■

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

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

○The changes that occur in an ecosystem from the pioneer to the climax community can be seen in one human generation.

○A high degree of species diversity does not always result in a stable ecosystem.

○The level of resilience in a plant community contributes to its long-term stability.

○Ecologists agree that climax communities are the most stable types of ecosystems.

○Disagreements over the meaning of the term “stability” make it difficult to identify the most stable ecosystems.

○The resilience of climax communities makes them resistant to destruction caused by humans.

参考答案：

1. ○Specific
2. ○The numbers of plants in them and the mix of species do not change
3. ○A change in the numbers of an organism does not affect an ecosystem’s properties
4. ○Climax communities
5. ○The exact meaning of the word “stability” is debated by ecologists.
6. ○They can be considered both the most and the least stable communities.
7. ○They have reduced diversity during mid-successional stages.
8. ○Ensure
9. ○To illustrate a general principle about the stability of systems by using an everyday example
10. ○Loses significance
11. ○A patchy environment is thought to increase stability because it is able to support a wide variety of organisms.
12. ○Neighboring
13. ○在The destruction 前加In fact, damage to the environment by humans is often much more severe than damage by natural events and processes.
14. ○2 3 5

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.

Paragraph 1: 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.

1. The word squander in the passage is closest in meaning to
○ Extend
○Transform
○ Activate
○ Waste

2. The word none in the passage refers to
○ Food
○ Plant or animal
○ Energy
○ Big body

3. In paragraph 1, the author explains the concept of energy expenditure by
○ Identifying types of organisms that became extinct
○ Comparing the scientific concept to a familiar human experience
○ Arguing that most organisms conserve rather than expend energy
○ Describing the processes of growth, reproduction, and metabolism

Paragraph 3: 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.

4. According to the passage, the classification of organisms as “opportunists” or “competitors” is determined by

○ How the genetic information of an organism is stored and maintained
○ The way in which the organism invests its energy resources
○ Whether the climate in which the organism lives is mild or extreme
○ The variety of natural resources the organism consumes in its environment

Paragraph 4：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.

5. The word dispersal in the passage is closest in meaning to

○Development
○ Growth
○ Distribution
○ 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.

○Because their seeds grow in places where competing plants are no longer present, dandelions are classified as opportunists.

○Dandelions are called opportunists because they contribute to the natural processes of erosion and the creation of gaps in the forest canopy.

○The term opportunists apply to plants whose seeds fall in places where they can compete with the seeds of other plants.

○The term opportunists apply to plants whose falling seeds are removed by natural processes.

Paragraph 7：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.

7. The word massive in the passage is closest in meaning to
- ○ Huge
- ○ Ancient
- ○ Common
- ○ Successful

8. All of the following are mentioned in paragraph 7 as contributing to the longevity of an oak tree EXCEPT
- ○ The capacity to create shade
- ○ Leaves containing tannin
- ○ The ability to withstand mild droughts and fire
- ○ The large number of acorns the tree produces

9. According to the passage, oak trees are considered competitors because
- ○ They grow in areas free of opportunists
- ○ They spend more energy on their leaves, trunks and roots than on their acorns
- ○ Their population tends to increase or decrease in irregular cycles
- ○ Unlike other organisms, they do not need much water or sunlight

10. In paragraph 7, the author suggests that most species of organisms
- ○ Are primarily opportunists
- ○ Are primarily competitors
- ○ Begin as opportunists and evolve into competitors
- ○ Have some characteristics of opportunists and some of competitors

Paragraph 5：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. ■

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?

Click on a square ■ to add the sentence to the passage.

12. Directions: Complete the table by matching the phrases below

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. This question is worth 4 points.

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

Opportunists	Competitors
● ● ● ●	● ● ●

Answer Choices

Vary frequently the amount of energy they spend in body maintenance

Have mechanisms for protecting themselves from predation

Succeed in locations where other organisms have been removed

Have relatively short life spans

Invest energy in the growth of large, strong structures

Have populations that are unstable in response to climate conditions

Can rarely find suitable soil for reproduction

Produce individuals that can withstand changes in the environmental conditions

Reproduce in large numbers

参考答案：

1. ○ Waste

2. ○ Energy

3. ○ Comparing the scientific concept to a familiar human experience

4. ○ The way in which the organism invests its energy resources

5. ○ Distribution

6. ○ Because their seeds grow in places where competing plants are no longer present, dandelions are classified as opportunists.

7. ○ Huge

8. ○ The large number of acorns the tree produces

9. ○They spend more energy on their leaves, trunks and roots than on their acorns

10.○ Have some characteristics of opportunists and some of competitors

11.○ 在 If their population 前加 Such episodic events will cause a population of

dandelions, for example, to vary widely.

12. ○ Opportunists：3 4 6 9 Competitors：2 5 8

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.

Shamans: holy people who act as healers and diviners

Paragraph 1 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.

1. The word others in the passage refers to
○Chambers
○Paintings
○Beasts
○Parades

2. The word Methods in the passage is closest in meaning to
○Ways
○Shades
○Stages
○Rules

3. What are the bones found in the Lascaux caves believed to indicate?

○Wild animals sometimes lived in the cave chambers.
○Artists painted pictures on both walls and bones.
○Artists ground them into a fine powder to make paint.
○Artists developed special techniques for painting the walls.

Paragraph 2: 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.

4. Why does the author mention Bushmen in South Africa in paragraph 2?
○To suggest that ancient artists from all over the world painted animals on rocks
○To contrast the location of their rock paintings to those found at Lascaux
○To support the claim that early artists worked in cramped spaces
○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?
○They also painted rocks outside caves.
○They did not live close to the cave entrances.
○They developed their own sources of light to use while painting.
○Their painting practices did not last for many years.

Paragraph 3: 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.

6. Why does the author mention secret ceremonies?
○To present a common opinion held by many scholars
○To suggest a similarity between two opinions held by scholars
○To suggest a possible explanation for a weakness in an opinion expressed in the passage
○To give evidence that contradicts a major opinion expressed in the passage

Paragraph 4 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.

7. The word accompanied in the passage is closest in meaning to

○Represented
○Developed into
○Were associated with
○Came after

8. According to paragraph 4, why do some scholars believe that the paintings were related to hunting?

○Because some tools used for painting were also used for hunting
○Because cave inhabitants were known to prefer animal food rather than plant food
○Because some of the animals are shown wounded by weapons
○Because many hunters were also typically painters

Paragraph 5 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.

9. According to paragraph 5, why do some scholars refer to a trance state to help understand the cave paintings?

○To explain the state of consciousness the artists were in when they painted their pictures
○To demonstrate the mythical significance of the strange geometric shapes
○To indicate that trance states were often associated with activities that took place inside caves
○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

○to look like an animal while a hunt took place
○to frighten off other hunters competing for food
○to prove that he is not a shaman
○to resist forces of nature thought to be present in animals

Paragraph 6 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.

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

○Keeping the paintings a mystery will increase their importance.
○The artists hid their tools with great intelligence and skill.
○Too many years have gone by since the images were painted.
○Answering the questions is not very important to scholars.

Paragraph 2: 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.

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?

Click on a square ■to add the sentence to the passage.

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

○The paintings may have recorded information about animal migrations, and may only have been useful for one migration at a time.

○The human figures represented in the paintings appear to be less carefully shaped than those of animals.

○It is possible that the animals in the paintings were of mythical significance to the tribe, and the paintings reflected an important spiritual practice.

○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.

○Some scholars believe that the paintings motivated hunters by allowing them to picture a successful hunt.

○Scientific analysis suggests that paintings were sprayed onto the rock walls with tubes made from animal bones.

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

参考答案:

1. ○ Beasts
2. ○ Ways
3. ○ Artists developed special techniques for painting the walls.
4. ○ To contrast the location of their rock paintings to those found at Lascaux
5. ○ They developed their own sources of light to use while painting.
6. ○ To suggest a possible explanation for a weakness in an opinion expressed in the passage
7. ○ Were associated with
8. ○ Because some of the animals are shown wounded by weapons
9. ○To give a possible reason for the strange appearance of the men painted on the cave walls
10. ○To look like an animal while a hunt took place
11. ○ Too many years have gone by since the images were painted.
12. ○在 Cave paintings 前加 This made it easy for the artists to paint and display them for the rest of the cave dwellers.
13. ○1 3 5

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.

Paragraph 1: 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.

1. Based on the information in paragraph 1, which of the following best explains the term wind farms?

○Arms using windmills to pump water
○Research centers exploring the uses of wind
○Types of power plant common in North Dakota
○Collections of wind turbines producing electric power

Paragraph 2: 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.

2. The word emit in the passage is closest in meaning to

○Use
○Require
○Release
○Destroy

Paragraph 3: 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.

Paragraph 4: 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.

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?

○They rely largely on coal-fired power plants.
○They contain remote areas where the winds rarely die down.
○Over 1 percent of the electricity in these states is produced by wind farms.
○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?

○These periods are times when wind turbines are powered by hydrogen gas.
○These periods provide the opportunity to produce and store energy for future use.
○These periods create storage problems for all forms of power generation.
○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

○Power does not reach all customers
○Wind farms cannot be used
○Solar power is more appropriate
○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?

○Both problems affect the efficiency of wind farms.
○Possible solutions are known for both problems.
○Wind power creates more noise than visual pollution.
○People are more concerned about visual pollution than noise.

Paragraph 5: 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.

7. The phrase this problem in the passage refers to

○Interference with the flight patterns of migrating birds in certain areas

○Building ridge lines that are ideal for wind turbines

○The killing of birds of prey by wind turbines

○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.

○Hawks, falcons, and eagles prefer to hunt along ridge lines, where wind turbines can kill large numbers of migratory birds.

○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.

○Some of the best locations for large wind farms are places that may cause problems for migrating birds and birds of prey.

○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?

○To argue that wind farms should not be built along ridge lines

○To point out that the deaths of migratory birds exceed the deaths of birds of prey

○To explain why some environmentalists oppose wind energy

○To suggest that wind turbines result in relatively few bird deaths

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

○Can identify

○Change

○Are reduced by
○Total

Paragraph 6: 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.

11. The word project in the passage is closest in meaning to
○Estimate
○Respond
○Argue
○Plan

12. Which of the following statements most accurately reflects the author's opinion about wind energy?
○Wind energy production should be limited to large wind farms.
○The advantages of wind energy outweigh the disadvantages.
○The technology to make wind energy safe and efficient will not be ready until the middle of the twenty-first century.
○Wind energy will eventually supply many countries with most of their electricity.

Paragraph 1: 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. ■

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

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

○Wind farms have already produced sufficient amounts of electricity to suggest that wind power could become an important source of electric power.

○Wind power has several advantages, such as low pollution and projected cost declines, compared to other energy sources.

○Responding to environmentalists concerned about birds killed by wind turbines, analysts point to other human developments that are even more dangerous to birds.

○The wind energy produced by just a small number of states could supply all of the power needs of the United States.

○Although wind power is not economical in areas with steady winds, alternative wind sources can be used to simulate wind power.

○Smaller countries, which use less electricity than large countries, are especially suited to use wind power to meet all their energy needs.

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

参考答案:

1. ○ Collections of wind turbines producing electric power
2. ○ release
3. ○ They contain remote areas where the winds rarely die down.
4. ○ These periods provide the opportunity to produce and store energy for future use.
5. ○ backup systems are needed
6. ○ Possible solutions are known for both problems.
7. ○ The killing of birds of prey by wind turbines
8. ○ Some of the best locations for large wind farms are places that may cause problems for migrating birds and birds of prey.
9. ○To suggest that wind turbines result in relatively few bird deaths
10. ○total
11. ○estimate
12. ○The advantages of wind energy outweigh the disadvantages.
13. ○在 and Texas 后加 **Some companies in the power industry are aware of this wider possibility and are planning sizable wind-farm projects in states other than California.**
14. ○1 2 3

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, 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 a lived in the harsher seasons of plant decoy 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 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. Wild life zoologist Hulmut 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 gate 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.

Paragraph 1: 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.

1. According to paragraph 1, which of the following is true of the white-tailed deer of Puget Sound?

○It is native to lowlands and marshes.

○It is more closely related to the mule deer of eastern Washington than to other types of deer.

○It has replaced the black-tailed deer in the open prairie.

○It no longer lives in a particular type of habitat that it once occupied.

Paragraph 2: 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, salad, dogwood, and almost any other shrub or herb. But this is fair-weather feeding. What keeps the black-tailed deer a lived in the harsher seasons of plant decoy 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.

2. It can be inferred from the discussion in paragraph 2 that winter conditions
   - ○ Cause some deer to hibernate
   - ○ Make food unavailable in the highlands for deer
   - ○ Make it easier for deer to locate understory plants
   - ○ Prevent deer from migrating during the winter

3. The word "inhibits" in the passage is closest in meaning to
   - ○ Consists of
   - ○ Combines
   - ○ Restricts
   - ○ Establishes

Paragraph 3：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 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."

4. The phrase "in the same breath" in the passage is closest in meaning to
   ○ Impatiently
   ○ Humorously
   ○ Continuously
   ○ 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?
   ○The number of deer within the Puget sound region has varied over time.
   ○Most of the explorers who came to the Puget sound area were primarily interested than in the West.
   ○There was more game for hunting in the East of the United States than in the West.
   ○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?
   ○The fort had become the headquarters for the Hudson's Bay Company.
   ○Deer had begun populating the meadows around the fort.
   ○Deer populations near the fort had been destroyed.
   ○Crop yields in the area around the fort had decreased.

Paragraph 4：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. Wild life zoologist Hulmut 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

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?

○To provide support for the idea that habitat destruction would lead to population decline

○To compare how two species of deer caused biotic changes in the wilderness environment

○To provide an example of a species of deer that has successfully adapted to human settlement

○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

○ Whose end has not been determined

○ That does not begin when expected

○ That lasts only briefly

○ Whose importance remains unknown

9. Which of the following statements about deer populations is supported by the information in paragraph 4?

○Deer populations reached their highest point during the 1940s and then began to decline.

○The activities of settlers contributed in unexpected ways to the growth of some deer populations in later times.

○The cleaning of wilderness land for construction caused biotic changes from which the black-tailed deer population has never recovered.

○Since the 1940s the winter populations of deer have fluctuated more than the summer populations have.

Paragraph 5: 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 gate 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 Linares, 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.

10. The word "rebound" in the passage is closest in meaning to

○ Decline

○ Recovery
○ Exchange
○ 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.

○Arthur Einarsen's longtime family with the Pacific Northwest helped him discover areas where deer had an increase in suitable browse.

○Arthur Einarsen found that deforested feeding grounds provided deer with more and better food.

○Biologist like Einarsen believe it is important to find additional open areas with suitable browse for deer to inhabit.

○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 reduction in the number of predators
○Restrictions on hunting
○The effects of logging and fire
○Laws that protected feeding grounds of deer

Paragraph 2—3: 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, salad, dogwood, and almost any other shrub or herb. But this is fair-weather feeding. What keeps the black-tailed deer a lived in the harsher seasons of plant decoy 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 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."

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 that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that 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 food

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-
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Answer Choices

○ 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.

○ 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.

○ 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.

○ Because Puget Sound deer migrate, it was and still remains difficult to determine accurately how many deer are living at any one time the western United States.

○ Although it was believed that human settlement of American West would cause the total number of deer to decrease permanently, the opposite has occurred for certain types of deer.

○ Wildlife biologists have long been concerned that the loss of forests may create nutritional deficiencies for deer.

参考答案:

1. ○ It no longer lives in a particular type of habitat that it once occupied.
2. ○ Make food unavailable in the highlands for deer
3. ○ Restricts
4. ○ Immediately
5. ○The number of deer within the Puget sound region has varied over time.
6. ○Deer populations near the fort had been destroyed.
7. ○To provide support for the idea that habitat destruction would lead to population decline
8. ○ Whose end has not been determined
9. ○The activities of settlers contributed in unexpected ways to the growth of some deer

populations in later times.

10. ○ Recovery

11. ○Arthur Einarsen found that deforested feeding grounds provided deer with more and better food.

12. ○Laws that protected feeding grounds of deer

13. ○在 Even with 前加 **There food is available and accessible throughout the winter.**

14. ○2 3 5

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 order 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 of 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 fertility.

Paragraph 1: 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 order 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.

1. The word "marked" in the passage is closest in meaning to
○Considerable
○Surprising
○Limited
○Adequate

2. Paragraph 1 supports which of the following statements about painting in Europe?
○It is much older than painting in Australia.
○It is as much as 28,000 years old.
○It is not as old as painting in southern Africa.
○It is much more than 30,000 years old.

Paragraph 2: 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.

3. The word "principal" in the passage is closest in meaning to
○Major
○Likely
○Well protected
○Distinct

4. According to paragraph 2, what makes some researchers think that certain cave paintings were connected with magical-religious activities?

○The paintings were located where many people could easily see them, allowing groups of people to participate in the magical-religious activities.

○Upper Paleolithic people shared similar beliefs with contemporary peoples who use paintings of animals in their magical-religious rituals.

○Evidence of magical-religious activities has been found in galleries immediately off the inhabited areas of caves.

○The paintings were found in hard-to-reach places away from the inhabited parts of the cave.

Paragraph 3: 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 of 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.

5. The word "trappings" in the passage is closest in meaning to

○Conditions

○Problems

○Influences

○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 of leave out essential information.

○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.

○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.

○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.

○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

○Upper Paleolithic artists used marks to record the animals they had seen

○the paintings were inspired by the need to increase the supply of animals for hunting

○the artists had removed rough spots on the cave walls

○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"?

○To argue that Upper Paleolithic art creased to include animals when herds of game became scarce

○To provide support for the idea that the aim of the paintings was to increase the supply of animals for hunting

○To emphasize the continued improvement in the quality of cave art throughout the Upper Paleolithic period

○To show the direct connection between the decrease in herds of game and the end of the Upper Paleolithic period

Paragraph 4: 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.

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 EXPECT:

○These animals were difficult to hunt because their unpredictable behavior.

○People preferred these animals for their meat and for their skins.

○The painters admired the beauty of these large animals.

○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?

○Hunters did not fear deer and reindeers as much as they did large game animals such as horses and mammoths.

○Hunters were not interested in hunting deer and reindeer because of their size and speed.

○Hunters preferred the meat and hides of deer and reindeer to those of other animals.

○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?

○This new art starts to depict small animals rather than large ones.

○This new art ceases to reflect the ways in which people obtained their food.

○This new art no longer consists mostly of representations of animals.

○This new art begins to show the importance of hunting to the economy.

Paragraph 5: 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.

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?

○They engraved animal figures on the shafts of spears and other objects.

○They may have used engraved signs to record the phases of the Moon.

○Their figurines represented the human female in exaggerated form.

○They may have used figurines to portray an ideal type or to express a desire for fertility.

Paragraph 3: 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 of 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. ■

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 explain 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.

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○Researchers have proposed several different explanations for the fact that animals were the most common subjects in the cave paintings.

○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.

○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.

○The cave paintings focus on portraying animals without also depicting the natural environments in which these animals are typically found.

○Some researchers have argued that the cave paintings mostly portrayed large animals that provided Upper Paleolithic people with meat and materials.

○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:

1. ○Considerable
2. ○It is as much as 28,000 years old.
3. ○Major
4. ○The paintings were found in hard-to-reach places away from the inhabited parts of the cave.
5. ○Decorations
6. ○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.
7. ○Upper Paleolithic people used the paintings to increase their luck at hunting

8.○To provide support for the idea that the aim of the paintings was to increase the supply of animals for hunting

9. ○The painters admired the beauty of these large animals.

10. ○Hunters did not fear deer and reindeers as much as they did large game animals such as horses and mammoths.

11. ○This new art no longer consists mostly of representations of animals.

12. ○They may have used engraved signs to record the phases of the Moon.

13. ○3

14. ○1 5 6

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 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.

Paragraph 1：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.

1. The word “accumulate” in the passage is closest in meaning to
○Grow up
○Build up
○Spread out
○Break apart

2. According to paragraph 1, which of the following is true about petroleum formation?
○Microscopic organisms that live in mud produce crude oil and natural gas.
○Large amounts of oxygen are needed for petroleum formation to begin.
○Petroleum is produced when organic material in sediments combines with decaying marine organisms.
○Petroleum formation appears to begin in marine sediments where organic matter is present.

Paragraph 1—2：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.

3. In paragraphs 1 and 2, the author's primary purpose is to

○Describe how petroleum is formed

○Explain why petroleum formation is a slow process

○Provide evidence that a marine environment is necessary for petroleum formation

○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.

○Higher temperatures and pressures promote sedimentation, which is responsible for petroleum formation.

○Deposits of sediments on top of organic matter increase the temperature of and pressure on the matter.

○Increase pressure and heat from the weight of the sediment turn the organic remains into petroleum.

○The remains of microscopic organisms transform into petroleum once they are buried under mud.

Paragraph 3: 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.

5. The word "adjacent" in the passage is closest in meaning to

○Nearby

○Existing

○Special

○Deep

6. Which of the following can be inferred from paragraph 3 about gushers?

○They make bringing the oil to the surface easier.

○They signal the presence of huge oil reserves.

○They waste more oil than they collect.
○They are unlikely to occur nowadays.

Paragraph 4: 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 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.

7. Which of the following strategies for oil exploration is described in paragraph 4?
○Drilling under the ocean's surface
○Limiting drilling to accessible locations
○Using highly sophisticated drilling equipment
○Constructing technologically advanced drilling platforms

8. What does the development of the Alaskan oil field mentioned in paragraph 4 demonstrate?
○More oil is extracted from the sea than from land.
○Drilling for oil requires major financial investments.
○The global demand for oil has increased over the years.
○The North Slope of Alaska has substantial amounts of oil.

9. The word "sloping" in the passage is closest in meaning to
○Shifting
○Inclining
○Forming
○Rolling

Paragraph 5: 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.

10. According to paragraph 5, the decision to drill for oil depends on all of the following factors EXCEPT

○permission to access the area where oil has been found
○the availability of sufficient quantities of oil in a pool
○the location of the market in relation to the drilling site
○the political situation in the region where drilling would occur

Paragraph 6: 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.

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

○Reach
○Flood
○Pollute
○Alter

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

○Provide examples of how oil exploration can endanger the environment
○Describe accidents that have occurred when oil activities were in progress
○Give an analysis of the effects of oil spills on the environment
○Explain how technology and legislation help reduce oil spills

Paragraph 2: 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. ■

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

Unless something acts to halt his 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.

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○Petroleum formation is the result of biological as well as chemical activity.

○The difficulty of finding adequate sources of oil on land has resulted in a greater number of offshore drilling sites.

○Petroleum extraction can have a negative impact on the environment.

○Petroleum tends to rise to the surface, since it is lower in density than water.

○Current methods of petroleum extraction enable oil producers to recover about half of the world's petroleum reserves.

○Accidents involving oil tankers occur when tankers run into shore reefs or collide with other vessels.

参考答案：

1. ○Build up

2. ○Petroleum formation appears to begin in marine sediments where organic matter is present.

3. ○Describe how petroleum is formed

4. ○Increase pressure and heat from the weight of the sediment turn the organic remains into petroleum.

5. ○Nearby

6. ○They are unlikely to occur nowadays.

7. ○Drilling under the ocean' s surface

8. ○Drilling for oil requires major financial investments.

9. ○Inclining

10. ○The location of the market in relation to the drilling site

11. ○Pollute

12. ○Provide examples of how oil exploration can endanger the environment

13. ○在 rock and sediment 后加 **Unless something acts to halt his migration, these natural resources will eventually reach the surface.**

14. ○1 2 3

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.

Paragraph 1: 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.

3. The word they in the passage refers to

○Applied-art objects

○The laws of physics

○Containers

○The sides of pots

4. Which of the following best expresses the essential information in the highlighted sentence? Incorrect answer choices change the meaning in important ways or leave out essential information.

○Functional applied-art objects cannot vary much from the basic patterns determined by the laws of physics.

○The function of applied-art objects is determined by basic patterns in the laws of physics.

○Since functional applied-art objects vary only within certain limits, arbitrary decisions cannot have determined their general form.

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

Paragraph 2: 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).

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

○They began using a material that made the statues weigh less

○They found a way to strengthen the statues internally

○The aesthetic tastes of the public had changed over time

○The cannonballs added too much weight to the statues

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

○To provide an example of a problem related to the laws of physics that a fine artist must overcome

○To argue that fine artists are unconcerned with the laws of physics

○To contrast the relative sophistication of modern artists in solving problems related to the laws of physics

○To note an exceptional piece of art constructed without the aid of technology

7. 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.

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Answer Choices

○The fine arts are only affected by the laws of physics because of the limitations of the materials that are used.

○ Applied-art objects are bound by the laws of physics in two ways: by the materials used to make them, and the function they are to serve.

○ Crafts are known as "applied arts" because it used to be common to think of them in terms of their function.

○ In the fine arts, artists must work to overcome the limitations of their materials, but in the applied arts, artists work in concert with their materials.

○Making fine-art objects stable requires an understanding of the properties of mass,

weight, distribution, and stress.

○In the twentieth century, artists working in the fine arts often treat materials in new ways whereas applied arts specialists continue to think of crafts in terms of function.

8. 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.*

TYPES OF ART STATEMENTS

The Applied Arts Select 3

-
-
-

The Fine Arts Select 2

-
-

Statements

○An object's purpose is primarily aesthetic.

○Objects serve a functional purpose.

○The incidental details of objects do not vary.

○Artists work to overcome the limitations of their materials.

○The basic form of objects varies little across cultures.

○Artists work in concert with their materials.

○An object's place of origin is difficult to determine.

Drag your answer choices to the spaces where they belong. To review the passage, click on View Text.

参考答案:

3. ○applied-art objects

4. ○Functional applied-art objects cannot vary much from the basic patterns determined by the laws of physics.

5. ○they found a way to strengthen the statues internally

6. ○To provide an example of a problem related to the laws of physics that a fine artist must overcome

7. ○ 2 4 6

8. ○ 2 5 6 1 4

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 Yucat 醬 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.

Paragraph 2: 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.

1. The word pose in the passage is closest in the meaning to

○Claim
○Model
○Assume
○Present

Paragraph 2: 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.

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?

○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

○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

○To explain why paleontologists have always been intrigued by the mass extinction at the end of the Cretaceous

○To provide evidence that an impact can be large enough to disturb the environment of the entire planet and cause an ecological disaster

Paragraph 3: 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 Yucat 醬 region of Mexico. The crater, now deeply buried in sediment, was originally about 200 kilometers in diameter.

3. Which of the following can be inferred from paragraph 3 about the location of the meteorite impact in Mexico?

○ The location of the impact site in Mexico was kept secret by geologists from 1980 to 1990.

○It was a well-known fact that the impact had occurred in the Yucat 醬 region.

○Geologists knew that there had been an impact before they knew where it had occurred.

○The Yucat 醬 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?

○They discovered a large crater in the Yucat 醬 region of Mexico.

○They found a unique layer of sediment worldwide.

○They were alerted by archaeologists who had been excavating in the Yucat 醬 region.

○They located a meteorite with a mass of over a trillion tons.

Paragraph 4: 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.

5. The word pose in the passage is closest in the meaning to

○Digging out

○Extending

○Destroying
○Covering up

6. The word consumed in the passage is closest in the meaning to
○Changed
○Exposed
○Destroyed
○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 large amount of dust blocked sunlight from Earth.
○Earth became cold and dark for several months.
○New elements were formed in Earth's crust.
○Large quantities of nitric acid were produced.

Paragraph 5: 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.

8. The phrase tentatively identified in the passage is closest in the meaning to
○Identified after careful study
○Identified without certainty
○Occasionally identified
○Easily identified

Paragraph 6: 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.

9. The word perspective in the passage is closest in the meaning to
○Sense of values
○Point of view
○Calculation
○Complication

10. Paragraph 6 supports which of the following statements about the factors that are

essential for the survival of a species?

○The most important factor for the survival of a species is its ability to compete and adapt to gradual changes in its environment.

○The ability of a species to compete and adapt to a gradually changing environment is not the only ability that is essential for survival.

○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.

○The factors that are most important for the survival of a species vary significantly from one species to another.

Paragraph 7: 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.

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.

○Until recently, nobody realized that Earth is exposed to unpredictable violent impacts from space.

○In the last few decades, the risk of a random violent impact from space has increased.

○Since most violent events on Earth occur randomly, nobody can predict when or where they will happen.

○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?

○Paleontologists

○Geologists

○The United States Congress

○NASA

Paragraph 6: 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.

13. Look at the four squares [■] that indicate where the following sentence can 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.

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○Scientists had believed for centuries that meteorite activity influenced evolution on Earth.

○An iridium-enriched sediment layer and a large impact crater in the Yucat 醬 provide evidence that a large meteorite struck Earth about 65 million years ago.

○The site of the large meteorite impact at the end of the Cretaceous period was identified in 1990.

○Large meteorite impacts, such as one at the end of the Cretaceous period, can seriously affect climate, ecological niches, plants, and animals.

○There have also been large meteorite impacts on the surface of the Moon, leaving craters like Tycho.

○Meteorite impacts can be advantageous for some species, which thrive, and disastrous for other species, which become extinct.

参考答案：

1. ○ Present
2. ○To explain why paleontologists have always been intrigued by the mass extinction at the end of the Cretaceous.
3. ○Geologist knew that there had been an impact before they knew where it had occurred.
4. ○ They found a unique layer of sediment worldwide.
5. ○ Digging out
6. ○ Destroyed
7. ○ New elements were formed in Earth’s crust.
8. ○ Identified without certainty
9. ○ Point of view
10. ○ The ability of a species to compete and adapt to a gradually changing environment

is not the only ability that is essential for survival.

11. ○ Until recently, nobody realized that Earth is exposed to unpredictable violent impacts from space.

12. ○NASA

13. ○在 environment 后加 **This is the criterion emphasized by Darwin's theory of evolution by natural selection.**

14. ○2 4 6