

iBT 新托福阅读黄金 22 篇

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第一篇

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.

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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

Oapplied-art objects

Othe laws of physics

○ containers

 \bigcirc 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.

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

OThe function of applied-art objects is determined by basic patterns in the laws of



physics.

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

OThe 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 6

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

Othey began using a material that made the statues weigh less



Othey found a way to strengthen the statues internally
Othe aesthetic tastes of the public had changed over time
Othe 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?
OTo provide an example of a problem related to the laws of physics that a fine artist
must overcome
OTo argue that fine artists are unconcerned with the laws of physics
OTo contrast the relative sophistication of modern artists in solving problems related to
the laws of physics
OTo 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

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

2. 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.

3. Crafts are known as "applied arts" because it used to be common to think of them in



terms of their function.

4. 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.

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

weight, distribution, and stress.

6. 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

- 1 . An object's purpose is primarily aesthetic.
- 2. Objects serve a functional purpose.
- 3. The incidental details of objects do not vary.
- $4\,$. Artists work to overcome the limitations of their materials.
- 5 . The basic form of objects varies little across cultures.
- 6 . Artists work in concert with their materials.
- 7 . 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



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on View Text.

参考答案:

3. O applied-art objects

4. OFunctional applied-art objects cannot vary much from the basic patterns

determined by the laws of physics.

5. Othey 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

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8.0 25614

参考译文

即便我们现在趋于根据主体材质来归类各种手工艺品,比如陶土,玻璃,木 头,纤维还有金属,我们更通常通过他们的功能来归类,这就是实用艺术品。 通 过按功能来区分手工艺品的观点,我们可以把它她们分为:容器,遮蔽物,支撑 物。毫无疑问容器,遮蔽物,支撑物能打会其功能。实用艺术品因为要考虑用于 制造和要容纳,支撑,遮挡的物品的质地继而受到客观条件的限制。 这些条件 具有普遍性,不受文化信仰,地理条件和气候所左右。如果一个壶没有底或者在 一侧有一个大开口,在任何传统意义上他都就很难被看作一个容器。 由于实用 艺术品的一般形式取决于客观条件,不可以武断,它们遵循基本的样式,这样功 能形式才能被明确的限定。 举个例子,建筑没有屋顶非常不寻常,因为它违反 了规范。虽然,并不是所有的功能物品都非常相似,那也是为什么我们鉴别商代 花瓶和印加花瓶 不同。区别不是他们的基本功能不同而是那些不影响其基本功 能附带细节带来的。

实用艺术品制作者会将其对于客观条件的敏感作重要考量。人们也往往想当 然的认为对于纯艺术品制造者也是如此。这种假定忽略了两者重要的不同点。纯 艺术品不像实用艺术品那样受到客观条件的约束。因为他们的基础诉求不是功能 性,它们仅仅受限于他们用来制作的材料。据个例子,雕塑必须要牢固,这就需



要了解质量,重量分布和压力方面的参数。绘画必须有坚挺的支架,以使画布绷 紧,并且绘画也不可以有毁损,裂纹,活着变色。这些艺术家必须克服的,因为 塔门往往侵犯到了她们对于艺术品的构想。举个例子,在意大利文艺复兴早期, 抬起一条腿的马的青铜像,往往有一个炮弹在脚下。这样做因为需要炮弹去支撑 腿的中的重量。换言之,炮弹摆着那里不是因为艺术家的对于美的意愿,而是因 为客观条件的要求。从雕塑家学到如何用铁支架加强他们的内部结构后,炮弹就 很快消失的这个事实上就知道,这个设计很明确是对于必要的结构性的妥协。(铁 比青铜来的结实得多)

虽然在 20 世纪纯艺术经常用心的方法处理材料,艺术家关于材料态度的基本区别仍是相对不变的。因此,不夸大的说,纯艺术的从业人员为克服材料的限制而工作,而从事实用美术的人则根据材料来工作。

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第二篇

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



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years ago. It lived around 3 million years after Pakicetus but 9 million before Basilosaurus. The fossil luckily includes a good portion of the hind legs. The legs were strong and ended in long feet very much like those of a modern pinniped. The legs were certainly functional both on land and at sea. The whale retained a tail and lacked a fluke, the major means of locomotion in modern cetaceans. The structure of the backbone shows, however, that Ambulocetus swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing. The large hind legs were used for propulsion in water. On land, where it probably bred and gave birth, Ambulocetus may have moved around very much

like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea

- 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?

OIt clearly indicates that cetaceans are mammals.

 \bigcirc It cannot conceal the fact that cetaceans are mammals.



 $\bigcirc\ensuremath{\mathsf{I}}$ is the main difference between cetaceans and land-dwelling mammals.

Olt cannot yield clues about the origins of cetaceans.

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

 $\bigcirc\ensuremath{\mathsf{It}}$ is not difficult to imagine what they looked like

OThere were great numbers of them.

 \bigcirc They lived in the sea only.

OThey 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

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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

 \bigcirc exact

 \bigcirc scarce

 \bigcirc valuable

 \bigcirc initial

4. Pakicetus and modern cetaceans have similar

OHearing structures



OAdaptations for diving

OSkull shapes

OBreeding locations

5. The word it in the passage refers to

○ Pakicetus

 \bigcirc Fish

○Life

 \bigcirc 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

OExplained

OVisible

 \bigcirc Identified

 \bigcirc Located

7. The hind leg of Basilosaurus was a significant find because it showed that Basilosaurus

OLived later than Ambulocetus natans

OLived at the same time as Pakicetus

 \bigcirc Was able to swim well

 \bigcirc Could not have walked on land



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

On land

 \bigcirc Both on land and at sea

 \bigcirc In shallow water

 \bigcirc 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, Ambulocetus may have moved around very much like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea

9. Why does the author use the word luckily in mentioning that the Ambulocetus natans fossil included hind legs?

 \bigcirc Fossil legs of early whales are a rare find.

OThe legs provided important information about the evolution of cetaceans.

OThe discovery allowed scientists to reconstruct a complete skeleton of the whale.

OUntil 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.

O Even though Ambulocetus swam by moving its body up and down, it did not have a backbone.

OThe backbone of Ambulocetus, which allowed it to swim, provides evidence of its missing fluke.

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

 \bigcirc 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

OStaying afloat

OChanging direction

O Decreasing weight

O 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?

OExtinct 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.

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○ 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.

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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.

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参考答案

1. OIt cannot conceal the fact that cetaceans are mammals.



- 2. OIt is not difficult to imagine what they looked like
- 3. Ovaluable
- 4. OSkull shapes
- 5. OPakicetus
- 6. Visible

7. Could not have walked on land

8. O In a marine environment

9. OThe legs provided important information about the evolution of cetaceans.

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

11. O Moving forward

12. 〇在 Missing 前添加 This is a question that has puzzled scientists for ages.

13-14. \bigcirc 1 2 5

参考译文:

鲸类动物的起源

众所周知的是,鲸类动物诸如白鲸,海豚是哺乳动物。它们并非是用腮呼吸, 而是用肺,并且能够培育小生命。它们的身体呈流线型,同时后鳍和尾片的存在, 通气孔的显现,表明它们和陆地哺乳动物有着密切的关系。然而,不像水獭以及 鳍足类动物那样,它们的前后肢是可水陆两用的,例如海豹,海狮,海象。去想 象第一只鲸鱼的原始容貌并不是一件容易的事。人们通过化石的记录得知鲸的存 在,但已经进化成完全的海生动物。到底陆地的鲸鱼和海洋里的鲸鱼之间的差异 是怎样的?直到现在的化石也依然无法说清水陆鲸类动物进化的媒介和过渡期 的状态。

允许科学家去复兴最有可能是鲸类动物的起源地,这是一个令人振奋的消息。1979 年,在巴基斯坦本部,一个寻找化石的小分队找到了鲸鱼的化石,他 们证实是最古老的。这块化石被赋以官方的名字"Pakicifus",用以纪念他们发 现这块化石的所在地。"Pakicetus"是在深层的岩石中发现的,这些岩石在 5200 万年前是用来构成河流的。同时从这些河流的存积物上可以发现它离远古著名的 海洋特里提那并不远。

"Pakicifus" 化石包含着一个完整原始动物的头盖骨,这是现代鲸类动物 在远古灭绝了的原始种群。尽管只是个头盖骨,但是"Pakicifus" 化石却提供 了极其珍贵的原始鲸类动物起源信息。这个头盖骨类似于水生鲸类,但它的颚骨 却缺少现代鲸鱼颚骨所有的填满脂肪和脂油的可以扩大的空间,这个空间是现代 鲸鱼用来接收水下的声音。"Pakicifus"可能类似陆地哺乳动物那样通过张开 耳朵来探测声音。这个头盖骨同样没有通气孔,这是水生鲸类能够潜水的另一个 16

进化。然而,专家认为"Pakicifus"的其它特征可以表明它是陆地中兽科动物 与水生鲸类的过渡期,其中中兽科动物是早已灭绝的食肉哺乳动物的一个种群。 这同时也表明了"Pakicifus"还没有适应海洋的生活,只能靠吃湿地的鱼类为 生。它可能在陆地交配繁殖育种。

1989 年,在埃及有了另一个重大发现。另一个早期鲸鱼"Basilosaurus" 的骨骼被发现,它们是在特提斯海残留的沉积物,而今暴露在撒哈拉大沙漠上被 发现的。"Basilosaurus"鲸鱼大约在 4000 万年前生存,晚于"Pakicifus"鲸 鱼 1200 万年。尽管这些骨骼是不完整的,但专家们发现它们包含着完整的后肢, 这些后肢鲜明特征是后足带有三个小足趾,这是迄今为止在原始动物中的第一次 发现。"Basilosaurus"的这些后肢还太小,远无法支撑 50 英尺长的身体在陆 地行走。毫无疑问,"Basilosaurus"是完全的水生鲸鱼,并且带有没有作用的, 退化的后肢。

在 1994 年,巴基斯坦报道了一个更令人兴奋的发现。现在刚灭绝的以步行 代替游泳的鲸鱼 "Ambulocetus natans" 曾在 4900 万年前的特提斯海生活过。 它大约晚于 "Pakicetus" 鲸鱼 300 万年,早于 "Basilosaurus" 鲸鱼 900 万年。 这块化石很幸运的保留着完整的后肢。

这后肢是强壮的并且有长足,非常像现在的鳍足类动物。它们在陆地和海洋都能使用。"Ambulocetus natans"鲸鱼保留了尾巴却缺少尾片,尾片是现代水生鲸类动物进行转位的主要工具。尽管缺少了尾片,从"Ambulocetus"鲸鱼的脊椎结构上可以看出来它也像现代鲸鱼一样通过摆动尾部使身体上下浮动来游



动。大的后肢通常被用来在水底推动前进。在陆地上, "Ambulocetus"交配繁 殖育种,行动起来可能很像现代的海狮。毫无疑问,鲸鱼是连接着陆地生命和海 洋生命的物种。

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第三篇

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

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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

Orestricted

 \bigcirc endangered



\bigcirc prevented

Orejected

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

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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?

 \bigcirc Increased stony content

OReduced water absorption

OIncreased 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

OPredictable

○ Complex

○Valuable

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

OAdjusting to stresses created by settlement

O Retaining their fertility after desertification

○ Providing water for irrigating crops

OAttracting 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

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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?

OLack of proper irrigation techniques

OFailure to plant crops suited to the particular area

O Removal of the original vegetation



$\bigcirc \mathsf{Excessive}$ use of dried animal waste

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

 \bigcirc consisting of

 \bigcirc hidden by

Oexcept for

 \bigcirc 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

Ointerfere with the irrigation of land

Olimit the evaporation of water

Orequire more absorption of air by the soil

 \bigcirc bring salts to the surface

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

EXCEPT

 \bigcirc soil erosion

Oglobal warming

Oinsufficient irrigation

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⊖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.

O 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.

OThe 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.

ODesertification 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?

OGovernments will act quickly to control further desertification.

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

O Desertification will continue to increase.

ODesertification 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

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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?

OThis 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

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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:

- $1.\bigcirc$ endangered
- 2. O Reduced water absorption
- 3. O Fragile

4. OAdjusting to stresses created by settlement

5. O Increasingly

6. O Removal of the original vegetation

7. Olacking in

- 8. Obring salts to the surface
- 9. Oinsufficient irrigation

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

11. O Desertification will continue to increase.

12.〇在 The consequences of 前加入 This economic reliance on livestock in certain

regions makes large tracts of land susceptible to overgrazing.

13-14.0134

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参考译文:

沙漠的形成

沙漠,大约占有地球表面面积的四分之一,最近几年它以惊人的速度扩展。

荒漠化是指原先不是沙漠的地方被沙漠的条件所扩展延伸成为沙漠。地球表面剩下的四分之三面积中有四分之一地方正在受到沙漠化的威胁。

荒漠化的主要是由于稳定的自然植被的开采以及土壤被风和水的频繁腐蚀。

在一些地方,松散的 土壤被风完全的刮走,只剩下岩石表层。在其它一些地方, 好的土壤可能会被移动,而沙子部分会不断的堆积形成移动的沙丘或是沙纹。

即便是保留着土壤表层的地方,植被的减少也明显的使土壤吸取地下水资源

的能力减弱。松散的土壤上的雨水使好的粘土转化为极密的泥土,这些极密的泥



土表面使得很少的雨水能够渗透。水的吸收急剧减少,同时又被大量吹走,导致 土壤被腐蚀率增加。而土壤吸收水分的能力进一步弱化导致土壤越发干燥,同时 植物也就进一步损坏,这便是土壤沙漠化形成的循环。

在一些地方,气候条件的干燥使得干燥区域大面积的增加。由于全球气温的 持续变暖,使得一些地方土壤干燥的面积增加速度远远超过了过去几千年。假如 由环境严重污染而导致的全球气温持续升高,这一进程会使荒漠化在未来数十年 内加速。

毫无疑问,在大部分地方的荒漠化主要是由于人类活动而非自然发展。在雨 量非常少的土壤边缘,荒漠上存在着脆弱的生态平衡,它们只有有限的能力去调 整适应持续增加的环境压力。

人口的增加给土地施加更大的压力以提供给他们食物和燃料。在湿润的季 节,土地可能能够应付这些压力。但在干旱的季节,沙漠边缘成为荒漠化是十分 普遍的现象,因为给予土地的压力远远超过了使它们减少的能力。

推到荒漠化进程的主要因素被证实是四个方面的行为:过分开采,过度放牧, 过分樵采,过度灌溉。由于人口密度增加,对粮食作物的培养已经扩展到逐渐干 燥的区域。这些区域尤其容易越发严重的干燥,以至于农作物种植经常失败。因 为大量农作物的增加使先前自然植被减少了,而农作物种植失败留下来大面积的 土地,没有了植被覆盖,土地就很容易被风和水侵蚀。

在雨量非常少的地方,草地是主要的自然植被种类,而饲养家畜有时当地主 要的经济收入来源。在当地家畜饲养数目的持续增加导致的结果是,植被覆盖的 减少,土地被大量践踏粉碎。而这通常伴随着土地干燥并且被逐渐的侵蚀。 在很多个国家木材是用来煮饭和加热的最主要的燃料。由于人口增多的压力 增加,人们大量砍伐木材,导致很多城市和乡村大面积的土地失去了树木和灌木。 同时人们大量使用动物的废弃物作为补充燃料也损害了土壤,因为这些有价值的 土壤成分调节剂和植物营养资源不再返回到了土壤里。

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造成土壤沙漠化的最后一个人为因素是由于人类不合理灌溉导致的土壤盐 渍化。因为灌溉的过度用水使水渗透到平地层。假如没有排水系统的存在,使水



的平地层上升,把溶化的盐分带到土壤表面。水蒸发掉,而盐分却留在了表面, 形成了白色的地壳层,这一地壳层阻止了空气和水与地下土壤的接触。 土壤沙漠化的最严重的问题是大量的人口对大量土地施加的影响,同样也来 自于资源回动的困难,或是流动进程的缓慢。一旦这土壤被侵蚀,几百年或者几 千年都将不会有新的土壤生成。在一些地方,考虑到土壤仍然存在,需要一个强 有力的土壤保护和植被覆盖计划,这样才能够扭转土壤表面不断沙漠化的现状。

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第四篇

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.

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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:

 \bigcirc One individual at a time viewed a film.

OCustomers could view one film after another.



OPrizefights were the most popular subjects for films.

 \bigcirc 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

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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

Oexplain Edison's financial success

Odescribe the model used to design Kinetoscope parlors

Ocontrast their popularity to that of Kinetoscope parlors

Oillustrate 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.

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

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

 \bigcirc Edison did not want to develop projection technology because it limited the number of



machines he could sell.

OEdison 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

OFrequently

OEasily

○ Intelligently

Obviously

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

 \bigcirc Criticism

29

OLeadership

OHelp

OApproval

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?

OThey were a more expensive form of entertainment.

OThey were viewed by larger audiences.

OThey were more educational.

OThey 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?

OThey decided how to combine various components of the film program.

OThey advised film-makers on appropriate movie content.

OThey often took part in the live-action performances.

OThey 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.

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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?

OSound and motion were simultaneously produced in the Mutoscope.

OMore than one person could view the images at the same time with the Mutoscope.

OThe Mutoscope was a less sophisticated earlier prototype of the Kinetoscope.

OA different type of material was used to produce the images used in the Mutocope.

9. The word it in the passage refers to

Othe advent of projection

Othe viewer's relationship with the image

Oa similar machine

 \bigcirc 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

OInexpensive to create

 \bigcirc Unfocused

OLimited in subject matter

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

⊖was enlarged



Owas improved

 \bigcirc 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."

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Where would the sentence best fit?

OWhen 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

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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,

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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.

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参考答案:

1. OPrizefights were the most popular subjects for films.

2. Odescribe the model used to design Kinetoscope parlors

- 3. CEdison did not want to develop projection technology because it limited the number of machines he could sell.
- 4. CEasily
- 5. OHelp

 $6.\bigcirc$ They did not require live entertainers.

- 7. OThey decided how to combine various components of the film program.
- 8. OA different type of material was used to produce the images used in the Mutocope.
- 9. Othe viewer's relationship with the image

10. O Small in size

- 11. Owas enlarged
- 12. 〇 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."

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参考译文:

早期的电影业



电影最初出现时不是大量人能共同消费的东西,直到图片被投放到黑暗的影 剧院屏幕上时,电影技术才从最初"显示设备"形式中改变过来。在"显示设备" 中,人们从以看电影为目的而制作的仪器的很小的窗口里观看。在 1894 年,托 马斯•爱迪生发名的"活动电影放映机"公布于众。它是为活动电影放映机在客 厅或长廊中使用而设计的,因为活动电影放映机只是一部个人化的机器,它只允 许一个顾客一次只能看 50 张胶卷的小短片。第一次活动电影放映机会客室只有 五台机器。每台机器价格是五美分,总共 25 美分。顾客们从一台机器到另一台 机器看它们之间的不同,就如著名的职业拳击赛者一样环绕,准备这最后关键的 一击以制胜。

这些活动电影放映机长廊设计是以照片展览为形成模式,这也证明了爱迪生 几年前的设计是成功的。在照片展览中,顾客们通过自己的耳朵听语言和音乐。 他们从一台机器移动到另一台,可以听到不同的记录语言或者音乐。活动电影放 映室的会客厅也有同样的功能。爱迪生更感兴趣将这些活动电影放映机销售给这 些会客者而不是那些使用它们制作电影的人,因为前者能拿到大约每台\$1,000, 而后者大约只有\$10 to \$15。他拒绝去发展投影技术,因为他认为只要他制作销 售投影机,电影放映者就只会买一台投影机而不是几台。

然而,电影放映者想要扩大他们的收益,他们希望做更好的准备能够同时给 几百个顾客投放一些电影,而不是一次一个。这样每次可以收费 25 到 50 美分。 从 1894 年活动电影放映机公布的一年之后,摄影师如 Louis and Auguste 34

Lumiere, Thomas Armat and Charles Francis Jenkins, and Orville and

Woodville Latham 以及爱迪生先前的助手 William Dickson 使投影机技术更加 完善。这些早期的投映机给大量的观众投放电影在杂耍剧团,合法的电影院,当 地城镇的礼堂,临时的前台电影院,游乐场和娱乐公园。

随着投影机在 1895 年到 1896 年的发展,运动的图片成为了大量消费的最重 要形式。在这之前,大量的观众是在剧场里观看表演,在那里可以同一时间呈现 给几百个观众杂耍,流行戏剧,音乐剧、歌唱表演,经典演奏,演讲和灯笼滑动 表演。但是电影与这些娱乐形式最显著的不同是,它不仅是有点类似与灯笼滑动



秀现场的表演,同样它还是一个领导者的表现,这位领导者就像是某场晚会的最 终节目制作者。

尽管早期的电影放映者通常在电影里带有真实的表演,但是他们事先录下大 量的电影内容,以便他们在很少或没有表演者的时候,影剧院的人也能够播放影 片。即便这样,早期的电影放映者还是将电影和其它娱乐节目混合着来播放电影 节目,有或者是兼有那些创造性仍然受到限制的演讲活动,在他们看来这样对观 众更有吸引力。而观众们看到的是电影的罕见事物和生活中普遍运动场景逼真的 再现,如火车的运动,海浪拍击海岸,人们行走在街上,以及看到由高超的摄影 师和相机制作出来的照片。

随着投影技术的发展,观看者与图像的关系不再是分开的,而是有了早期放 映设施活动电影放映机和妙透镜的结合,妙透镜是代替了赛璐珞的特性,能够通 过个人摄影卡上一系列的图像来再生图像动画的机器。它突然间成为了公众的一 个体验,观众能够和十二个,二十个,甚至是上百个人共享。与此同时,观众所 看到的图像也扩大了,从最小的西洋镜高度为 1 或 2 英寸的规格,到与实物大小 类似的 6 或 9 英尺。

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第五篇

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.

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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 lo

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?

 \bigcirc Some aggressive animal species have a highly developed hypothalamus. ,_

OArtificial stimulation of the hypothalamus results in aggression in animals.

OAnimals behaving aggressively show increased activity in the hypothalamus.

OAnimals who lack a hypothalamus display few aggressive tendencies.

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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

Onot all individuals are skilled in finding food

Oindividuals try to defend their young against attackers

Omany more individuals are born than can survive until the age of reproduction

Oindividuals 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

 \bigcirc unavoidable

Oregrettable

 \bigcirc controllable

 \bigcirc unsuitable

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

Oidentify

 \bigcirc modify



\bigcirc satisfy

 \bigcirc simplify

5. The word they in the passage refers to

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Ofuture explosions

Opent-up aggressive impulses

 \bigcirc outlets

Oindirect ways

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

desire to vent aggression on their parents and

Oa frustration that their parents do not give them everything they want

O a fear that their parents will punish them and stop loving them

Oa desire to take care of their parents

 \bigcirc a desire to vent aggression on other family members

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

Odeliberately build up their aggression to make themselves stronger

Ousually release aggression in explosive ways

Omust vent their aggression to prevent it from building up

Otypically 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.

OPeople who believe that they are fighting a just war act aggressively while those who believe that they are fighting an unjust war do not.

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

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

OPeople 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

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following may influence the decision whether to act aggressively EXCEPT a person's

Omoral values

Oprevious experiences with aggression

○instinct to avoid aggression

Obeliefs about other people's intentions

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

OMistrust



OMisinterpret

OCriticize

OResent

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?

OThe 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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OThe 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. According to Freud,

however, 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.

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

been repressed continue to exist and demand expression. 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. OAnimals behaving aggressively show increased activity in the hypothalamus.
- 2. Omany more individuals are born than can survive until the age of reproduction
- 3. Ounavoidable
- 4. Osatisfy
- 5. Opent-up aggressive impulses
- 6. Oa fear that their parents will punish them and stop loving them
- 7. Omust vent their aggression to prevent it from building up
- 8. OPeople who believe that aggression is necessary and justified are more likely to act

aggressively than those who believe differently.

9. Oinstinct to avoid aggression

10. O Misinterpret

11.〇在 The Freudian perspective 前加入 According to Freud, however, impulses

that have been repressed continue to exist and demand expression.

12.012356

参考译文:

侵略

动物攻击异己时,会表现出非常明显的侵略行为。心理学家们已采用了数种



方法去了解人类的侵略性行为。

生物学方法。许多生物结构和化学物质似乎与侵略行为有关。大脑的一个区 域——下丘脑是其一。很多动物因为受到某些刺激表现出本能的侵略反应。下丘 脑似乎与这天生的反应模式有关:对很多动物的下丘脑某一部分的电刺激一样的 42

侵略行为。然而,人类的大脑要复杂的多,大脑的其他结构好像可以抑制可能的 本性。

社会生物学——生物学方法的一个分支表明侵略性对于人类而言是很自然 甚至是需要的。社会生物学将侵略行为包括在内的许多社会行为看成是遗传决定 的。想想达尔文的进化论,达尔文认为许多个体的存在不仅仅是找到食物长到成 年期这么简单。继续为生存挣扎。有些人拥有有利的特征可以在生存斗争中获得 优势,那些人更可能存活下来并且将他们的基因传给下代。在很多物种中这些特 征包括侵略性。因为侵略性的个体更可能存活和繁殖,不管怎样,与侵略性行为 相关的基因更容易传给接下来的那代。

这种心理学观点在好多根据上受到攻击。其一,人能欺骗其他物种,正是这 种能力而不是他们的侵略性是人类存在的主导因素。其二,人的变化无常使得人 们不相信他们是被侵略性冲动主导或支配。

精神动力学方法。理论家采用了精神动力学方法认为内在矛盾对了解包括侵略行为在内的人类行为至关重要。例如,Sigmund Freud(弗洛伊德)认为侵略性的冲动是对日常生活中挫折的不可避免的反应。通常,孩子有时想对其他人发泄侵略性的冲动情感,包括他们的父母。因为即使是他们最周到的父母也不能立即满足他们的所有要求。然而,孩们也因为害怕父母的处罚以及失去父母的爱而压制了大多数的侵略性冲动。从某种意义上说,弗洛伊德的观点是:把我们看作"蒸汽机。"通过坚持而不是释放蒸汽我们为今后的爆炸埋下伏笔。积聚的侵略性冲动需要释放。可以通过父母直接发泄,比如,毁坏家具,或可以在以后的人生中对陌生人发泄。

根据精神动力学理论可知,避免有害侵略的最好方法是提倡危害较小的侵略 方式。在蒸汽机类比中,言语性的侵略可以释放一些侵略性的蒸汽。所以应该为



自己最喜欢的体育团队欢呼。精神分析学家,理疗师采用了一种精神动力学方法, 他们将侵略冲动的发泄看成"精神发泄。"据推测,精神发泄是一种安全阀。在 精神发泄的有用性上的研究结果很混乱。一些研究表明精神发泄可缓解紧张且降 低以后侵略性行为的可能性。但是,其他研究表明部分蒸汽的释放事实上会今后 更大的侵略性行为。

认知方法。认知心理学家断言,我们的行为是受我们的价值观,我们解释自 己的处境的方式以及选择的影响。例如,认为侵略性在战争时期是必要的且是有 理的人很可能其行为带有侵略性,而认为特殊的战争或侵略行为是不正当的或认 为侵略永远是不正当的人不大可能表现出侵略性。

一个认知理论表明恼人的痛苦的事件引起不愉快的感觉。相反,那些感觉可 以导致侵略性行为,但不是自动引起的。认知因素介入其中。人是否表现出侵略 性取决于一些因素,比如他们侵略性的经历以及他们对他人动机的解读。研究表 明侵略性的人经常曲解他人的动机,支持的证据来源于这样的研究。例如,他们 认为他人想害自己,而其实不是。

精神发泄:在精神动力学理论中,强烈情感的催泄或缓解紧张。

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第六篇

ARTISANS AND INDUSTRIALIZATION

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes 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.

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 44

rights and traditional ways of life. Craftworkers such as carpenters, printers, and tailors formed unions, and in 1834 individual unions came together in the National Trades' Union. The labor movement gathered some momentum in the decade before the Panic of 1837, but in

the depression that followed, labor's strength collapsed. During hard times, few workers were

willing to strike* or engage in collective action. And skilled craftworkers, who spearheaded the

union movement, did not feel a particularly strong bond with semiskilled factory workers and

unskilled laborers. More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850's, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

Workers were united in resenting the industrial system and their loss of status, but they were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics. For them, the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives. As United States society became more

specialized and differentiated, greater extremes of wealth began to appear. And as the new markets created fortunes for the few, the factory system lowered the wages of workers by dividing labor into smaller, less skilled tasks.

Paragraph 1: Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades

to apprentices and journeymen. In addition, women often worked in their homes 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?

OThey were primarily produced by women.

OThey were generally produced in shops rather than in homes.

OThey were produced with more concern for quality than for speed of production.
OThey 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

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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.

OMasters demanded moral behavior from apprentices but often treated them irresponsibly.

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

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



OMasters 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

 \bigcirc Established

○Followed

OUpset

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

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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
Osupport the idea that it was difficult for workers to adjust to working in factories
Oto show that workers sometimes quit because of the loud noise made by factory
machinery

Oargue that clocks did not have a useful function in factories

Oemphasize 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

Ostatus in the community

Oopportunities for advancement

Ocontact 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. Craftworkers such as carpenters, printers, and

tailors formed unions, and in 1834 individual unions came together in the National Trades' Union. The labor movement gathered some momentum in the decade before the Panic of 1837,

but in the depression that followed, labor's strength collapsed. During hard times, few workers were willing to strike* or engage in collective action. And skilled craftworkers, who spearheaded the union movement, did not feel a particularly strong bond with semiskilled factory workers and unskilled laborers. More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850's, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

6. The phrase gathered some momentum in the passage is closest in meaning to



- Omade progress
- Obecame active
- $\bigcirc \mathsf{caused}$ changes
- \bigcirc combined forces
- 7. The word spearheaded in the passage is closest in meaning to
- \bigcirc led
- \bigcirc accepted
- \bigcirc changed
- \bigcirc resisted
- 8. Which of the following statements about the labor movement of the 1800's is
- 47
- supported by paragraph 5?
- Olt was most successful during times of economic crisis.
- Olts primary purpose was to benefit unskilled laborers.
- OIt was slow to improve conditions for workers.
- OIt 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 royal ties, and disagreements over
- tactics as two of several factors that



Oencouraged workers to demand higher wages Ocreated divisions among workers Ocaused work to become more specialized Oincreased workers' resentment of the industrial system 10. The word them, in the passage refers to **○**Workers OPolitical patty loyalties ODisagreements over tactics ○ Agents of opportunity Paragraph 1: Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. 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. 48 11. Look at the four squares I 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? OBefore 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 craftworkers, 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

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 As master craftworkers, 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

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older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

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. OThey were produced with more concern for quality than for speed of

production.

2. OThe responsibilities of the master to the apprentice went beyond the teaching



of a trade.

3. OUpset

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

factories

5. O contact among workers who were not managers

6. Omade progress

 $7.\bigcirc$ led

8. OIt was slow to improve conditions for workers.

9. Ocreated divisions among workers

10. OWorkers

11.〇在 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.

 $12. \bigcirc 2\ 3\ 5\ 6\ 7$

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参考译文:

工匠与工业化

1815 年以前,美国的制造业只是有经验的工匠在家庭和作坊中生产产品。 作为师傅,他们将他们的手艺传授给徒弟和雇工。除此之外,女性在家里通常兼 职从事一些生产活动,将批发商资本家提供的未经加工的原料制成成品。1815 年以后,这种老式的制造模式开始让位于倾向雇佣非技术或半技术劳动者的机械 化工厂。廉价的交通运输网络、城市的兴起和可用资本与贷款都促进了制造业从 手工作坊到工厂生产的转变。

习惯于工厂工作的劳动力的产生并不易。在工厂兴起之前,工匠们只在家里 生产产品。徒弟被视为家庭的一部分,师傅不光负责传授他们手艺,还要教育他 们并监督他们的道德行为。雇工懂得如果他们的技艺足够精湛,他们就会成为受 人尊敬的工匠师傅并拥有他们自己的作坊。同时,有经验的工匠并不按照时钟以 稳定的速度生产产品,而是冲刺式的紧张工作与更多的闲暇时间相交替。



工厂改变了这一切。工厂生产的商品没有手工制作的精致,并且工人对于技 艺的自豪感让位于来自增加生产效率的压迫感。工厂生产所采用的新方法需要工 人具有全新的更加严格的时间感。工厂的生产方式使得一个更受严格控制的时间 表成为必需:当铃声响起时工作开始,工人们保证机器以稳定的速率运转。与此 同时,工人们被要求摒弃旧习惯,因为工业主义需要工人具备机敏、可靠和自律 的素质。旷工与迟到会影响生产率,同时因为工作的专业化,也会打断工厂的正 常运转。工业化不仅促成了一种工作组织形式的根本改变,而且改变了工作的本 质。

第一代经历这些改变的工人并非轻而易举地接受这些新观点。工厂的时钟变 成了新工作规定的象征。一名最终离开磨坊场的工人袒露真情地抱怨道:"让我 们听从于叮叮当当的钟表简直就把我们当成了活生生的机器。"伴随人身自由丧 失而来的是工人社会地位的缺失。不同于在手工作坊里徒弟与监督他们的师傅密 切的工作关系,工厂明显地将工人阶层与管理层区分开。很少有工人能够僭越等 级提升到管理层的岗位,甚至很少有工人能够实现身为工匠时的梦想:经营起自 己的生意。即使待遇优厚的工人也感到了他们地位的下降。

在这种新近出现的经济秩序里,有时候工人们会组织起来保护他们的权利和 传统的生活方式。诸如木匠、印刷工人和裁缝等技术工人成立了联盟,并且在 1834 年各个单独的联盟组织成立了国家职工联盟。在 1837 年大恐慌前的十年中, 工人运动聚集了一些力量,但是随后而至的萧条最终导致了工人力量的瓦解。在 困难时期,很少有工人愿意罢工或者参与工人集体运动。身为工人运动急先锋的 技术工匠,并未感到与半技术工厂工人和非技术劳动者之间有显著密切的联系。 超过十年的抗争最终使得截止到 1850 年代大多数行业的工作时间缩短至 10 小 时,并且法院也承认工人罢工的权利,但这些权利并未立即产生巨大的影响。 工人们联合起来因为他们憎恨工业体系和他们社会地位的丧失,但是他们却

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被民族和种族的对抗、性别差异、相冲突的宗教观点、职位差别、对不同政党的 忠诚和策略的分歧分割开来。对于工人来说,工厂和工业化不代表着机遇,却时 刻提醒着他们自立的丧失,并成为一种控制他们生活的手段。随着美国社会变得



更加专业化和差异化,更大规模的极端财富开始出现。并且因为新兴市场只给少数人创造财富,工业体系通过将劳动分割成更小的、技术含量更低的工作来降低工人们的工资。

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第七篇

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

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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

Ouse

Oimprove

Ocounteract

Obalance

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

OQualities

OFins

OGrooves

Odepressions

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3. Why does the author mention that Airplanes retract their landing gear while in

flight?

OTo show that air resistance and water resistance work differently from each other

OTo argue that some fishes are better designed than airplanes are

OTo provide evidence that airplane engine have studied the design of fish bodies

OTo 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

OComplex

OAmazing

OCreative

OPractical

5. According to paragraph4, the long bills of marlins, sailfish, and swordfish probably

help these fishes by

O Increasing their ability to defend themselves

OAllowing them to change direction easily



OIncreasing their ability to detect odors

O 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?

OThey lack a swim bladder.

OThey need to suck in more water than other fishes do.

OThey have large muscles for breathing.

OThey 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.

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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,

OThese fishes often have a problem opening their mouths while swimming.

OThe streamlining of these fishes prevents them from slowing down.

OThe streamlining of these fishes tends to slow down their breathing.

Oppening the mouth to breathe can reduce the speed of these fishes.



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

OReduce

ORemove

ODirect

Oprovide

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

Oswim directly through eddies

Omake efficient use of water currents

Ocover great distances without stopping

Ogain 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.

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10. According to paragraph 9, which of the following is true of bluefin tunas?

OTheir eyes and brain are more efficient than those of any other fish.

OTheir body temperature can change greatly depending on the water temperature.

OThey can swim in waters that are much colder than their own bodies.

OThey 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 [■I 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?

OConsequently, 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.

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○ ■ 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

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• (

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. Oimprove
- 2.OFins
- 3. OTo demonstrate a similarity in design between certain fishes and airplanes
- 4. O Complex
- 5. O Reducing water resistance as they swim
- 6. OThey lack a swim bladder.
- 7. OOpening the mouth to breathe can reduce the speed of these fishes.
- 8.ODirect
- 9. Omake efficient use of water currents
- 10. OThey can swim in waters that are much colder than their own bodies.
- 11.〇在 Accordingly 前加入 Consequently, tunas do not need to suck in water.
- 12.0145

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参考译文:

游泳机(械)

金枪鱼,鲭鱼,和长嘴鱼(枪鱼,旗鱼和箭鱼)持续游泳。其饲养,求偶,

繁殖,甚至"休息"的进行,都能在不断的活动状态中进行。其结果是,几乎每个 方面的机构形式和功能都像是一些游泳"机器"可以适应以及提高它们的游泳能

力。

许多机械都是改编于这些鱼类,以减少水的阻力(拉力)。有趣的是,其 中这些与水动力方面相似功能的适配器,可以改善空气动力学性能的高速飞机。



虽然这是人类工程师的一个新的游戏,可金枪鱼和他们的亲属演变的成"高科技" 的设计是在很久以前了。

金枪鱼, 鲭鱼, 和长嘴鱼的这种流线型已成为一种艺术形式。他们的身体是 圆滑和紧凑的。金枪鱼的这种形状, 实际上, 是工的程认为几乎最理想的。大多 数物种的身体缺少鱼鳞, 使其平顺光滑。眼睛平齐于身体, 根本不突出来。他们 还覆盖着光滑的, 透明的盖子, 以减少阻力。鳍是硬的, 平滑的, 狭窄的, 这些 特征也有助于减少阻力。在不使用时, 该鳍有植入索贿沟槽或凹陷的特征, 使身 体保持顺滑, 不会破坏他们平顺的轮廓。飞机收回其起落装置, 也是同这是同样 的道理。

金枪鱼, 鲭鱼, 和长嘴鱼, 甚至有比这些改善的流动力学更先进的适应性。 长的嘴也许可以帮助青枪鱼, 旗鱼和箭鱼他们通过流动的水。许多超音速飞机也 有类似针状的鼻子。

大多数金枪鱼和长嘴鱼有一系列的脊骨和鳍在尾巴附近。虽然大多数的鳞已 丢失了,金枪鱼和鲭鱼还保留着一块粗糙的鱼鳞在头部附近叫做(鱼的)胸甲。 该脊骨,鱼鳍和胸甲,并直接帮助直冲的水流通过鱼的身体表面,像是作为一 种途径,以减少阻力一样(见附图)。同样,超音速飞机也有类似的功能特征。 因为一直在游动,金枪鱼必须张开嘴使水流经过腮部。因此,它们大部分肌 肉都退化了,这些肌肉是其他鱼种用于吸水和将水从腮部排出的。实际上,金枪 鱼必须通过游泳来呼吸。同时,它们也必须一直游泳以防止下沉,因为它们基本 上或完全丧失了其他鱼种用于保持漂浮的游泳气囊。

一个潜在的问题是张嘴呼吸有损于它们的精简,使其速度减慢。一些金枪鱼 在舌头上有特殊的凹槽,有利于引导水流通过嘴巴并从腮缝流出,从而减少了水 的阻力。

与减少阻力一样,金枪鱼们在增强推进力上也有进化。同样,这些也被工程 师们所嫉妒。它们高而狭窄的尾巴有利于尽可能地增加推动力。也许对上述的这 些鱼种和其他快速游泳的鱼来说,最重要的是感知和利用漩涡和逆流的能力。它 们能从会降低它们速度的漩涡滑过,并获得漩涡的推力。科学家和工程师们正在

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研究这种能力,以期设计出更高效的轮船推进系统。 这些鱼的的肌肉组织和保持温暖体温的机制也相当高效。一只蓝鳍金枪鱼在 7°C(45°F)下能够保持 25°C(77"F)以上的体温。温暖的体温可以使肌肉、大脑和 眼睛都更好地运作。长嘴鱼则有进一步的进化。它们有专门改善肌肉组织的加热 器,可以使眼睛和大脑保持温暖,从而使这些重要的器官都保持最好的运行状态。

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第八篇

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 61

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?

OThe President granted a portion of his power to the Senate.

OThe President began to address the Senate on a regular basis.

○ It was the beginning of the modern presidency in the United Stales.

 \bigcirc It was the first time that the Senate had been known to oppose the President.



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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?

OThe Democratic Party's main source of support

OThe people that Democrats claimed were unfairly becoming rich

OThe 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?

OThey would promote the advancement of society as a whole.

OThey would cause disagreements between Whigs and Democrats

OThey would supply new positions for Whig Party members.

OThey 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?

OTo regulate the continuing conflict between farmers and businesspeople

OTo restrict the changes brought about by the market

OTo maintain an economy that allowed all capable citizens to benefit

 \bigcirc 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

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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

OArgument

OTendency

OExample



$\bigcirc \mathsf{Warning}$

7. According to paragraph 4, a Democrat would be most likely to support government

action in which of the following areas?

OCreating a state religion

OSupporting humanitarian legislation

 \bigcirc Destroying monopolies

O 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

OPower

OReality

ODifficulty

 \bigcirc Idea

9. Which of the following can be inferred from paragraph 5 about variations in political

beliefs within the Whig Party?

OThey were focused on issues of public liberty.

OThey caused some members to leave the Whig party.

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OThey were unimportant to most Whigs.



OThey 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

Oworkers unhappy with the new industrial system

Oplanters involved in international trade

Orising entrepreneurs

 \bigcirc 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.

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



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

OThe semisubsistence farming areas dominated by Democrats became increasingly

isolated by the Whigs' control of the market economy.

O 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 65

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?

ODuring 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.

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

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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.

- •
- •

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

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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:

 $1.\bigcirc$ Greatly

2. OIt was the beginning of the modern presidency in the United Stales.

3. OThe people that Democrats claimed were unfairly becoming rich

4. OThey would promote the advancement of society as a whole.

5. OTo maintain an economy that allowed all capable citizens to benefit

6. OTendency

7. O Destroying monopolies

8. Oldea

9. OThey reflected regional interests.

10. Oplanters involved in international trade

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

13.0156

参考译文:

美国现代总统制度的发展是由安德鲁杰克逊开始的。这个民主党领导人在 1829 年掌权,直至 1837 年卸任。(美国现代总统制度的发展开始于民主党领袖 安德鲁杰克逊 1829 年到 1837 年就任美国总统期间。)在他任职期间,总统的权 力被无限量的扩大了。"总统是美国人民的直接代表,"他在参议院反对他时如 是说,"美国总统由公民选举产生,对公民负责。"杰克逊用这番话重新定义了 内阁的角色,及其与民众的关系。

在杰克逊的第二任期间,他的反对者们逐渐联合起来形成了辉格党。辉格党 和民主党在市场、银行、商业引发的变化上持有不同的态度。民主党倾向于把社 会视作平民(农民、种植园主、工人)与一小撮贪婪的贵族间持续的斗争。民主 党宣称这些银行家、投资者一即"钞票贵族"在自己利益驱使下操纵着银行系 统,并且以鼓励投机和迅速赚取不义之财的行为败坏国民道德。(他们鼓励人们 投机,渴望突然而来的财富,整个国家的良好风气因此而正逐渐消失)民主党人 68

既想要从市场经济中获得好处,又不想牺牲单一土地所有权的共和体制(不想牺牲单纯的农业国的特点)他们想要市场经济带来的财富而不想要竞争,不想改变 社会;不想要复杂的交易;不要大城市的主宰和随着市场经济而来的独立性的丧 失。

另一方面,辉格党对市场更为适应。对于他们来说,商业和经济的发展是文 明化的动力。辉格党人没有预见农民、工人和商人、银行家的冲突。经济发展会



通过增加国民收入和就业机会使每个人受益。政府的职责是提供一个井然有序运 作良好的经济环境,保证给每一个有能力的公民机会。

辉格党和民主党的分歧不仅表现在对市场的态度上,而且表现在中央政府究 竟该在人民生活中起到多少作用上。抛开安德鲁杰克逊想做一个强势总统不谈, 民主党本身就坚信限制政府的做法。政府在经济中的角色就是通过摧毁垄断和特 权来鼓励竞争。为了遵循限制政府的做法,民主党人同样否定了道德准则属政府 行为的范畴。民主党人确信,宗教和政治应划清界限,而大体上,他们也反对人 道主义立法。(反对从人性本善为起点出发来立法)

相反地,政府权力在辉格党人眼中是积极的。他们认为,应该用政府权力保 护个人权力和公众自由,在个人努力不见效时扮演特殊角色。通过规划经济和竞 争,政府可以保证机会平等。确实,辉格党的政府促进公众福利超过了经济所能 承受的。个别来说,美国北部的辉格党还认为政府力量应该用来推广国家的道德 福利。他们更加偏好社会重组法案和补助教育。

在某些方面两党对社会的完善是相似的。为了在投票中更具竞争力,辉格党 和民主党都要在社会最大群体即农民还有工人中获得大力支持。任何一个党若只 讨好穷人或富人都不可能赢得选举。然而,辉格党偏好把精力花费在商业阶层上。 辉格党博得了需要信用来贷款以在世界贸易中出售棉花和米的种地的人,渴望卖 出余粮的农民和希望改变现状的工人的喜好。民主党则吸引了隔离于市场外或不 习惯市场的农民、工业系统外的工人和想打破垄断开发新市场的新兴小企业家的 欢心。辉格党在城镇市区还有完全融入市场经济的农村区域很强势,而民主党主 宰了与市场隔绝,经济稍逊的半农耕地区。

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第九篇

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 Dawin'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 70

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 OUnhappy ○Thoughtful OUncertain 2. The author mentions "Baring the teeth in a hostile way" in order to Odifferentiate one possible meaning of a particular facial expression from other meanings of it Osupport Darwin's theory of evolution Oprovide an example of a facial expression whose meaning is widely understood Ocontrast a facial expression that is easily understood with other facial expressions Paragraph 2: Most investigators concur that certain facial expressions suggest the same 71 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

OEstimate

OAgree

OExpect

 \bigcirc Understand

4. The word them in the passage refers to

OEmotions

○People

○ Photographs

○Cultures

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

Guinea?

OThey did not want to be shown photographs.

OThey were famous for their story-telling skills.

OThey knew very little about Western culture.

OThey 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.

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

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

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



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

Paragraph 3: Psychological researchers generally recognize that facial expressions reflect

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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 Dawin'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?

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

OThey would become less intense.

OThey would last longer than usual.

OThey 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?



OThe reactions of people in experiments to cartoons OThe tendency of people in experiments to cooperate OThe release of neurotransmitters by people during experiments OThe long-term effects of repressing emotions 9. The word rate in the passage is closest in meaning to OJudge OReject ODraw OWant 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 73 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 Opependent

OApplicable

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

Olt first suppresses stress, then intensifies it.

Olt may cause fear and tension in those who see it.

 \bigcirc It can damage the lip muscles.

OIt 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?

OThis 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 74

people around the world to indicate what emotions were being depicted in them. Those



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Most investigators concur that certain facial expressions suggest the same emotions in all people. This universality in the recognition of emotions was demonstrated by using rather simple methods. Moreover, people in diverse cultures recognize the emotions manifested by

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the emotions of anger, disgust, fear, happiness, and sadness. He then asked people around

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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.

- •

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.

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- 参考答案:
- 1. Unhappy
- 2. Oprovide an example of a facial expression whose meaning is widely understood
- 3. O Agree
- 4. OPhotographs
- 5. OThey knew very little about Western culture.
- 6. OThe Fore exhibited the same relationship of facial expressions and basic emotions that is

seen in Western culture when they acted out stories.

- 7. OThey would become less intense.
- 8. OThe reactions of people in experiments to cartoons
- 9. Judge
- 10. O Applicable

11. OIt may either heighten or reduce emotional response.

12.〇在 In classic research 前加 This universality in the recognition of emotions was

demonstrated by using rather simple methods.

13.0246

参考译文:

情感的表达

在世界范围内各种不同的文化里,人们都是要经历欢乐和悲伤的,但我们怎么能区别其

他人是高兴还是沮丧?结果表明,许多情感的表达可能是普遍的。微笑似乎是一个友好和同

意的普遍的标志。查尔斯达尔文在 19 世纪指出的以充满敌意的方式露出牙齿可能是一 种普

遍的愤怒迹象。作为的进化论的创始人,达尔文认为,普遍承认的面部表情有生存的价值。

例如,面部表情可以以非语言的方式显示敌人(或朋友)的接近。

大多数调查同意,某些面部表情在所有的人显示同样的情绪。此外,来自不同文化的人 们在认识到情绪所表现出的面部表情。在经典的研究保罗埃克曼拍下表现愤怒,厌恶, 恐惧,



幸福,悲伤情绪的人的照片。然后,他要求世界各地的人们说明他们所表达的情绪。这 些质

疑从欧洲大学生成员到居住在新几内亚高地的部落的得来。所有团体,包括那些几乎没 有接

触西方文化的,同意描绘的感情。该预测还显示熟悉的表情时,问他们会如何反应,如 果他

们中的字符的故事,所谓的基本情绪反应。埃克曼和他的同事们最近获得了类似的结果 在

10 个研究文化的参与者被允许向大家报告,多次被情绪所表现出的面部表情。与会者 普遍

认为这两个情绪正在显示并情绪更加激烈。

心理研究人员普遍认识到,面部表情反映情绪状态。事实上,各种情绪状态会引起某些 模式的电活动中的面部肌肉和大脑。面部反馈假设认为,然而,这之间的因果关系情绪 和面

部表情也可以工作在相反的方向发展。根据这一假说,信号从脸部肌肉("反馈)是送回情

感中心的大脑,所以一个人的面部表情可以影响人的情绪状态。试想 Dawin 的话: "自由

表达的外向迹象情绪加剧它。另一方面,镇压,尽可能的所有离港的迹象软化我们的感情。

"微笑能引起感情的良好意愿,例如,皱着眉头愤怒?

心理研究已经引起了一些有趣的结论面部反馈假设。造成参加实验的微笑,举例来说,

导致他们的报告更积极的感情和对利率漫画(幽默画的人或情况)被更多的幽默。当他们造

成皱眉头,他们的漫画率为更加咄咄逼人。

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什么是之间可能存在的联系的面部表情和情感?一个环节是觉醒,这是水平的活动或准 备活动的一个有机体。激烈的收缩面部肌肉,如那些用于意味着恐惧,加剧觉醒。自我 感觉

更加觉醒然后导致情绪加剧的活动。其它链接可能涉及改变大脑的温度和释放神经递质 (物



质的传递神经冲动。)的收缩面部肌肉都影响了内部情绪状态,反映了它。埃克曼发现,

所谓的杜兴微笑,其特点是"乌鸦的脚"皱纹周围的眼睛和微妙的下降,眼睛涵盖倍, 使皮肤

上面的眼睛动作略有下降的眼球,可以导致愉快的感觉。

埃克曼的看法可能是有关英国的表达"保持咬紧牙关"作为建议处理的压力。这可能是 一

个"硬"唇抑制情绪反应-只要不是嘴唇颤抖与恐惧或紧张。但是,当情绪,导致激烈的嘴唇

是更激烈,涉及强有力的肌肉紧张,面部反馈可提高情绪反应。

第 1 款规定: 欢乐和悲伤都是经验丰富的人在所有世界各地的文化, 但我们怎么能告诉

其他人时,非常高兴或沮丧?结果表明,该表达的许多情感可能是普遍的。微笑似乎是 一个

普遍的签署友好和批准。霸菱的牙齿在充满敌意的方式,指出了查尔斯达尔文在 19 世纪,

可能是一种普遍的迹象愤怒。作为发端的进化论,达尔文认为,普遍承认的面部表情有 生存

的价值。例如,面部表情可以信号的办法的敌人(或朋友)在没有语言。

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第十篇

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

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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?

 \bigcirc They occur more often by uplift than by erosion

OThey occur only at special times.

OThey occur less frequently now than they once did.

OThey occur quickly in geological terms.

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

○Unusually

○ Comparatively

Occasionally

\bigcirc 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?

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OTheir current height is not an indication of their age.

OAt present, they are much higher than the mountains of the Caledonian range.

OThey were a uniform height about 400 million years ago.

OThey are not as high as the Caledonian mountains were 400 million ears ago.

4. The word relics in the passage IS closest in meaning to

OResemblances

ORegions

ORemains

ORestorations

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

Oeffect of climatic change on sea level

Oslowing down of volcanic activity

Oforce of Earth's crustal plates hitting each other

Oreplacement 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?

OTo explain the origin of a chemical that can erode rocks

OTo contrast carbon dioxide with carbonic acid

OTo give an example of how rainwater penetrates soil

OTo argue for the desirability of preventing erosion

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

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Odries gradually

Oflows slowly

Ofreezes 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

 \bigcirc cold areas

Omasses 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
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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? OGlacial activity

ORock debris

OTree roots

OSand

11. Look at the four squares **u** 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.

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○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

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- 参考答案:
- 1. OThey occur quickly in geological terms.
- 2. Comparatively
- 3. OAt present, they are much higher than the mountains of the Caledonian

range.

- 4. O Remains
- 5. O force of Earth's crustal plates hitting each other
- 6. OTo explain the origin of a chemical that can erode rocks
- 7. Of lows slowly
- 8. Omasses of ice
- 9. OAlthough they seem permanent, hills and mountains exist for a relatively
- short period of geological time.
- $10.\bigcirc$ Sand

11.〇在 In dry areas 前加 Under different climatic conditions, another type of destructive force contributes to erosion.

12. OConstructive processes 1 5 6; Destructive processes 3 7

参考译文:

绝大多数人认为景色是一成不变的,事实上地球是一个充满活力的机体, 他的表面在人类文明史中正在持续缓慢的转变。(当然与大约 4500 亿年前的冰河 时代相比确是快了很多)。主要有两种影响来改变地形,建设性的过程,比如能 创造新的地表特征的地壳隆起。破坏性的力量,比如能缓慢扫除突出地貌的地表



侵蚀。

山峰因为能经受住自然力量的洗礼通常被认为是永恒的代名词,但是事 实上在地质学的角度上来讲他们的存在是相对短暂的。一般来说,越高的山峰他 的形成时间越近。例如喜马拉雅山的形成只有刚刚 50 万年,低矮的山峦则趋于 更加古老,并且常常是高耸的山脉腐蚀后的遗留.在大约 400 万年前,当今天的 北美和欧洲大陆结合的时候,古苏格兰山脉与现今的喜马拉雅山脉同样雄伟,但 是古苏格兰造山运动在今天遗留下来的却只是相比低矮很多的格林兰山脉,美国 的北阿巴拉契亚山脉,苏格兰高地和挪威海岸高原。

地壳被认为是分成为巨大,可移动的部分——板块,他们漂移在柔软的 岩石可塑层。一些山脉正是由于这些板块互相冲击并迫使在板块边缘的岩石突起 而形成的。在这个过程中,原本形成在海床上的水成岩可能被拱起高达 26000 多英尺。另外一些山脉则可能是由于地震将地壳震裂而产生的岩石堆积形成的断 块山,还有一种山脉则是由活火山带的火山运动形成的,例如北美洲西部的喀斯 喀特山脉,他正是由火山岩和火山灰形成的,另外他的许多山峰也是死火山。 不论山脉形成的具体原因是什么,,一旦陆地高出海平面,都难逃被外力摧 85

毁的厄运。裸露的岩石遭受着不断变化天气的攻击,逐渐破碎成碎石块被带走。 然后形成沉积岩。因此任何地貌都只是代表了造山与侵蚀两种力量长年斗争中的 一个短暂的阶段。

多种多样的天气是侵蚀作用的主要推动者。雨水冲刷走松动的土壤并渗 入到岩石的缝隙,二氧化碳在空气中与雨水作用形成了可以对岩石进行化学腐蚀 的弱酸(碳酸)。雨水渗透到地下并能在不久以泉水出流出,这些泉水是那些能够 从岩石间穿过并将碎石从高山带到平原的溪水河水的源泉。

在严寒的环境下,岩石能被冰霜粉碎。冰川在长期寒冷的区域形成,这些缓 慢移动的大冰块带着大量的的腐蚀岩屑阻断了山谷。在干旱的地带,风则是侵蚀 的主要手段。它带着沙子中的微粒冲击着裸露的岩表,由此将岩石吹散成更多的 沙粒;即使生物对地表的形成也是功不可没,大树将它们的根插入岩缝之中,加 速了岩石的碎裂。相反的草根和其他矮小植物则是帮助固定土壤,减少风蚀作用。



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第十一篇

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

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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?

Olt cannot hold rainwater for long periods of time.

Olt prevents most groundwater from circulating.

 $\bigcirc\ensuremath{\mathsf{It}}$ has the capacity to store large amounts of water.

OIt absorbs most of the water it contains from rivers.

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

○ Confusing

○ Comforting

OUnbelievable

○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

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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

 \bigcirc Far away

OHidden

OPartly visible

Oliscovered

4. According to paragraph 2, where is groundwater usually found?

 \bigcirc Inside pieces of sand and gravel

 \bigcirc On top of beds of rock

OIn fast rivers that are flowing beneath the soil

OIn spaces between pieces of sediment

5. The phrase "glacial outwash" in the passage refers to

 \bigcirc Fast rivers

OGlaciers

OThe huge volumes of water created by glacial melting

OThe 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

OA mountain valley

 \bigcirc Flat land

 \bigcirc A lake floor

 \bigcirc 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

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 \bigcirc Cover

OChange

OSeparate

OSurround

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

 \bigcirc That is enough about

 \bigcirc Now let us turn to

 \bigcirc Of greater concern are

 $\bigcirc \mathsf{This}$ is related to

9. The word "plugged" in the passage is closet in meaning to

 \bigcirc Washed

 \bigcirc Dragged

 \bigcirc 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?

OIt is unusually solid

 \bigcirc It often has high porosity.

 \bigcirc It has a low proportion of empty space.

 \bigcirc It is highly permeable.

11. What is the main purpose of paragraph 7?

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○To explain why water can flow through rock

OTo emphasize the large amount of empty space in all rock

OTo point out that a rock cannot be both porous and permeable

 \bigcirc 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.

OSurface 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.

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

OSmall 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.

 \bigcirc 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 [

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.

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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

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

OWater is stored underground in beds of loose sand and gravel or in cemented

sediment.

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

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



OLike sandstone, basalt is a crystalline rock that is very porous.

OBeds of unconsolidated sediments are typically located at inland sites that were once

underwater.

参考答案

- 1. OIt has the capacity to store large amounts of water.
- 2. OUnbelievable
- 3. OHidden
- 4. O Inside pieces of sand and gravel
- 5. OThe particles carried in water from melting glaciers.
- 6. O A mountain valley
- 7. O Cover
- 8. OThat is enough about
- 9. OFilled up
- 10. \bigcirc It often has high porosity.

11. OTo distinguish between two related properties of rock

12. O 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.

13.〇在 It is held there 前加 What, then, determines what proportion of the water stays and what proportion drains away?

14.0236

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参考译文:

地下水

地下水是用来描述渗透到土地里的水的词语,这部分水充满了所有存在的空隙。 到现在为止最丰富的水资源是大气水,它是作为水周期一部分循环的地下水。普 通的大气水是已经从地表、雨雪湖泊和河川侵入地下的水。它有时会留在地下很 长时间,然后才再浮现在地表。一想起来在固体地下,有足够的空间容纳全部的 水,好像很不可思议。



然而,必要的空间却以许多的形式存在着。在疏松不坚固的沙子和砾石间 有许多沙粒和小石子,最常见的空隙就位于其中。这种物质的地层在土壤之下视 线看不见的地方是很常见的。携带着大量粗糙沉积物的湍急河流所流过的任何地 方都可以发现它们的踪迹。例如,随着在上次冰河时期北美的冰层平稳地融化, 大量的水就会流出。水中总是携带着石子、砾石和沙石,这就是所谓的冰河期的 冰水沉积。它将随着水流域减慢而沉淀下来。

今天,同样的事情发生了,尽管是相对比较小的规模。携带沉积物的河水 溪流,从山谷到相对平坦的陆地上无论出现在哪,随着水流变慢弃下载重;水流 通常蔓延成扇形沉积物,以一个平缓的扇形斜面形式沉积下来。沉积物也会在水 流流入湖泊或海洋处速度减慢的地方沉积下来。沉淀的沉积物开始时都是在湖泊 底部或海底,但是当将来的某个时期海平面下降或陆地上升时它们就会定位于内 陆,这样的底层通常有几千米厚。

陆地上任何地方的低地势的国家可能以前就是曾经被土壤隐埋没的一条 河流的河床。如果它们现在就在河水的上地表层之下(潜水面),以前河床上的 砾石和沙石还有它的沙洲将充满地下水。

这就是不牢固的沉积物。坚固的(或粘固的)沉积物,也容纳数以万计的 微小的容纳水的毛孔。这是因为原始微粒中的缝隙统称并不完全塞满了粘固的化 学物质,而且部分原始微粒很可能被滤过的地下水溶碎。不是在结合发生时就是 以后的任何时期,结果就是,比方说,砂岩能够与沙石形成的疏松的沙石一样多 孔。

这样,任何沉积物疏松还是坚固,总体积的一部分是由空的场所构成的。

多数水晶岩石是相当牢固的,一个常见的例外就是玄武岩。它是一种固化的火山 熔岩,这种岩石有时充满了微小气泡,使其非常多孔。

岩石的这部分空白空间就是所致的多孔性。但要注意到多孔性与渗透形式 不同的。渗透形衡量了水流过物质的难易程度,它取决于与之相关的独立孔洞和 裂缝的大小。

如果把有水渗透的沉积物或岩石试样放到适宜的干燥的地方,式样中的大部分水都会脱离出来。但仍会有一些存留下来,依附在所有的固体表面上。这些



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水由于表面张力的作用被维持,如果没有的话水会立刻从任何湿润表面脱离,使 其完全干燥。因此,湿润试样的水总量一半被认为是会与不会从试样脱离的全部 水量。

这两种水的相对含量随岩石与沉积物种类不同而改变,即使它们的渗透性 相同。气孔的大小决定了水量多少。如果气孔很大,其中的水会由于过重而克服 吸引它的表面张力而掉落。但如果气孔足够小,其中的水会像薄膜一样,由于过 轻而不能克服吸引它的表面张力,从而被稳固的吸附住。

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第十二篇

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

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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 Opebated ○ Created ○ Supported 2. The word "attributes" in the passage is closest in meaning to OAscribes OLeaves OLimits 96 ○ Contrasts 3. According to paragraph 1, theories of the origins of theater OAre mainly hypothetical OAre well supported by factual evidence O Have rarely been agreed upon by anthropologists OWere expressed in the early stages of theater's development 4. According to paragraph 1, why did some societies develop and repeat ceremonial actions? OTo establish a positive connection between the members of the society OTo help society members better understand the forces controlling their food supply OTo distinguish their beliefs from those of other societies

 \bigcirc 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

OThe divorce of ritual performers from the rest of society

OThe separation of myths from rites

OThe celebration of supernatural forces

6. The word "autonomous" in the passage is closest in meaning to

OArtistic

OImportant

OIndependent

OEstablished

7 . According to paragraph 2, what may cause societies to abandon certain rites?

O Emphasizing theater as entertainment

O Developing a new understanding of why events occur.

OFinding a more sophisticated way of representing mythical characters

O Moving from a primarily oral tradition to a more written tradition

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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:

OTheater allows people to face that they are afraid of.

OTheater gives an opportunity to imagine a better reality.

OTheater is a way to enjoy imitating other people.

OTheater provides people the opportunity to better understand the human mind.

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

OThe author presents two theories for a historical phenomenon.

OThe author argues against theories expressed earlier in the passage.

OThe author argues for replacing older theories with a new one.

OThe 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

OCompromise

OInclination

OTradition

ORespect

11. Why does the author mention "comedy"?

○To give an example of early types of theater

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OTo explain how theater helps a society respond to threats to its welfare

OTo help explain why detachment is needed for the development of theater

 \bigcirc 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.

OA society's rites were more likely to be retained in the oral tradition if its myths were admired for artistic qualities.

OThe artistic quality of a myth was sometimes an essential reason for a society to



abandon it from the oral tradition.

OSome early societies stopped using myths in their religious practices when rites ceased

to be seen as useful for social well-being.

OMyths 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.

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Answer choices

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 $\bigcirc\ensuremath{\mathsf{The}}$ presence of theater in almost all societies is thought to have occurred because

early story tellers traveled to different groups to tell their stores.

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

OThe more sophisticated societies became, the better they could influence desirable occurrences through ritualized theater.

 $\bigcirc \mathsf{Some}$ theories of theater development focus on how theater was used by group leaders

to group leaders govern other members of society.

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

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

参考答案:

- $1.\bigcirc$ Supported
- 2. OAscribes
- 3. OAre mainly hypothetical
- 4. OTo increase the society's prosperity
- 5. OThe separation of myths from rites
- 6. O Independent
- 7. O Developing a new understanding of why events occur.
- 8. OTheater gives an opportunity to imagine a better reality.
- 9. OThe author presents two theories for a historical phenomenon.
- $10. \bigcirc$ Inclination
- 11. \bigcirc To help explain why detachment is needed for the development of theater
- 12. OMyths sometimes survived in a society's tradition because of their artistic



qualities even after they were no longer deemed religiously beneficial.

13.〇在 Thus 前加 To enhance their listener's enjoyment, storytellers continually make their stores more engaging and memorable.

14.0256

参考译文:

戏剧的起源

为了试着描述戏剧的起源,我们应该主要依靠推测,因为没有多少具体 的证据供我们使用。在 19 世纪末 20 世纪初,由人类学家拥护的理论目前被广泛 接受,它把戏剧想象成一种脱胎于神秘和宗教仪式的艺术。在它的早期发展过程 中,一个社会的统治者开始意识到一些能够影响甚至控制它的食物供给和福利的 力量。在没有了解自然原因的情况下,他们把一些合意或不合意的事情都归咎于 超自然的或有魔力的力量。在感知了一些团体的特定行为和他们所期望的结果之 间显而易见的联系之后,这些团体重复、完善了这些行为并把它形式化了,成为 一种固定的仪式或是宗教仪式。

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这些故事(神话)在这种仪式下可能接着就成长起来了。这些神话经常 包括这种仪式庆祝或试图影响的超自然的代表。在这种仪式或附加的庆典中,表 演者们可能会穿上戏装和面具来扮演这个神秘的角色抑或是超自然力量。但是当 一个民族变得更加精明老于世故了,他们对超自然力量和与之对应的巧合关系的 想法会改变。所以他们会遗弃或修改某些仪式。但是那些在这些仪式中逐渐壮大 起来的神话会继续成为这个团体的口头习惯,甚至有可能在某些脱离于仪式的情 况下被演绎出来。当这件事发生时,戏剧成为一项独立的活动的第一步迈了出来, 接着,娱乐和审美价值便会渐渐取代先前的带有神话色彩和社会性质的有效关 注。

尽管戏剧起源于宗教仪式的说法是目前最流行的,但是在任何情况下这 都不是关于戏剧起源的唯一理论。戏剧起源于说书被提出是另一种可能。在这个 理论中,与故事相关并聆听故事被视为是人类基本的乐趣。因此,对于一个事件 的回忆(一次打猎、战役或是其它功勋伟业)在讲述人的童话剧和模仿以及每个



不同的演绎者下显得精雕细琢。

一个差不多相近的理论认为戏剧是由哑剧的舞蹈、节奏或体操、或动物 声音的模仿进化而来的。对于表演者技术、精湛技艺和高贵气质的欣赏被视为是 这些美妙的活动进化为被广泛承认的戏剧表演的动力。

为了进一步探寻戏剧可能的起源,一些学派也建立了关于促使人们发展 戏剧动力

的理论。为什么戏剧会发展,为什么在戏剧停止为宗教仪式服务以后它还有这么 大的价值?大多数答案要追溯到关于人类心智和人类基本需求的理论。亚里士多 德在公元前 4 世纪提出,人们通过模仿其他人、事物和动作并观看这些模仿来获 得乐趣。另一个在 20 世纪提出的理论认为人类具有幻想的天分,相比于这些日 常生活的形式,他们更满足于寻求重塑现实。因此,幻想或虚构(戏剧的一个形 式)允许人们具体化他们的焦虑和害怕并面对它们,同时在虚构中满足他们的愿 望,人们通过戏剧定义并理解世界或是逃避不如意的现实。

但是无论是人们模仿的本能还是对幻想的嗜好都不是单独的导致戏剧发

展成一项独立的艺术。因此,我们需要很多其它的解释。一个必要的条件似乎是 从人类难题角度出发。比如,这个条件的标志是喜剧视觉的出现,因为戏剧要求 足够的分离,这样把社会规范中的偏差当作荒谬的而不是对公众群体福利的严重 威胁。另一个影响戏剧独立的条件是审美感觉的出现。比如一些早期的社会学家 不再认为一些仪式有利于他们的福利并舍弃了它们,但是他们保留了那些口头传 述的在这些仪式里发展的神话并且因为它们的艺术性质而不是宗教作用热爱它 们。

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第十三篇

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

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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



OGradual

○ Complex

 \bigcirc Visible

OStriking

2 . Which is the lower timberline mentioned in paragraph 1 likely to be found?

 \bigcirc In an area that has little water

○In an area that has little sunlight

OAbove a transition area

 \bigcirc 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

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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.



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

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

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

OIncreased 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:

OBecause they are low, they are less exposed to strong winds.

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

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

OTheir 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

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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

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

OThere is no agreement among scientists as to exactly why plant growth is sharply

different above and below the upper timberline.

OThe 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.



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

 \bigcirc 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.

 $\bigcirc \mathsf{D}\mathsf{e}\mathsf{spite}$ 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:

 $1.\bigcirc$ Striking

 $2.\bigcirc$ In an area that has little water

3. OThe deformed shapes of trees at high altitudes show that wind velocity,

which increase with altitude, can cause serious hardship for trees.

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

5.〇在 melt small snowdrifts 后加 This explains how, for example, alpine cushion plants have been found growing at an altitude of 6,180 meters.

6.0236

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参考译文

山坡上森林到树木苔原的转变常常是引人注目的。在一个垂直距离仅有几十 平方米的地方,树木消失后会被低灌木,药材和牧草的生命形式所取代。这一快 速转变称为树木上行或林木线。通常由于缺少水分,在许多干旱的地区也有减少 的树带界线在森林或沙漠的下边缘。

上树带界线,像雪线是最高的热带和最低的极区。他的范围从海平面在极地地区 至 4500 米的干亚热带和 3500-4500 的湿热带地区。林树木通常是长青的,这表 明比阔落叶植物在极端恶虐的环境线上有一定的优势。然而也有一些地区,阔叶 落叶树形成了树界带线,例如种白桦树可能存在部分喜马拉雅山。

在上线的树 木开始变得扭曲和变形。尤其是在中层和上层的维度往往会取得更 大的高度对脊,而在热带地区的树木达到更高的山谷。这是因为中高维度的树带



界线强烈影响持续 时间和深度的积雪,由于积雪较深和持续较长的山谷,树木 往往到达更高的山谷,即使他们遇到更大的风和贫瘠的土地。在热带地区,山谷 更加有利,因为它们不容 易干涸,它们少霜冻,它们有更深的土壤。目前还没 有普遍的看法和解释为什么会有这样一个戏剧性的树木停止生长在树带界线,各 种环境因数可能发挥作用,例如 积雪太多,可以扼杀树木,雪崩和雪蠕可以破 换和摧毁它们。不久前雪减少了有效的生长季节,试苗木无法建立自己。 随 着海拔和风速的增加能导致对树木非常严重的压力,照这个样子会形成畸形 的形态在高纬度。一些科学家建议在这种情况下提高紫外线和海拔能发挥作用, 同时食草 和放牧例如野生山羊可能是另一个因素。或许更重要的环境因素是温 度,如果生长季节太短,气温太低数芽和花蕊不能成熟到足以越冬存活几个月。 以上的树线有一个气候带一般称为高山苔原。紧挨着的苔原有一个比较适度 的低地灌木,药材,草组成。而较高的数量和物种的多样性的减少,直到有很多 裸露地面,偶尔苔藓和地衣和一些俯卧垫植物。有些植物甚至可以生存的有利小 环境以上的雪线。最高的植物在世界各地发生的六千百米马卡鲁峰在喜马拉雅山 脉。在这个伟大的高度,岩石,温暖的阳光,融化小雪堆。

最 突出的特点,植物高寒区是其低增长的形式。这使他们能够避免出现最坏的 情况严格的强风,并允许他们使用的温度升高紧邻地面。在一个地区的低温限制, 生命的 重要性,更多的热表面附近是至关重要的。在低增长的形式也可以允许 工厂利用绝缘提供了冬季积雪。在赤道山脉的低增长方式是不太普遍。

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第十四篇

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 107

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:



OArchitecture is visual art.

OArchitecture reflects the cultural values of its creators.

OArchitecture has both artistic and scientific dimensions.

OArchitecture 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.

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

○In existence

OWithout question

OAchievable

OMost 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

а



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.

 \bigcirc Unchanging physical laws have limited the size and strength of buildings that can be

made with materials discovered long ago.

OBuilding materials have changed in order to increase architectural size and strength,

but physical laws of structure have not changed.

OWhen people first started to build, the structural methods used to provide strength and size were inadequate because they were not based on physical laws.

OUnlike 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

OCreated

OIntroduced

○ 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

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OEssential

OVariable

○ Practical

OIndependent

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

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

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

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

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

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

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

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

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

OThey 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?

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

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

OModern buildings have components that are as likely to change as the human body is.
OIn 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

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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

ODifficult

ONecessary

 \bigcirc Skilled

 \bigcirc Shared

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

 \bigcirc To indicate that the combined skeletons and skins of the stone buildings of Machu

Picchu were similar to igloos and adobe structures

 \bigcirc 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?

OThe Romans were the first people to use the stone arch.

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

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

OThe 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

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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

OArchitects 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.

 $\bigcirc \mathsf{Throughout}$ history buildings have been constructed like human bodies, needing

distinct "organ" systems in order to function.

 \bigcirc Both clients and architects are responsible for the mediocre designs of some modern



buildings.

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

OThe 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. OArchitecture has an indirect effect on life.

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2. O Achievable

3. OUnlike building materials, the methods of support used in architecture have not changed

over time because they are based on physical laws.

4. OCreated

5. OEssential

6. OThe availability of suitable building materials no longer limits the types of structures that

may be built.

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

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

buildings do.

9. O Difficult

10. OTo provide an illustration of the kind of construction that was required before arches

were invented

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

arch.

12.〇在 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.



13.〇在 Thus 前加 To enhance their listener's enjoyment, storytellers continually make their

stores more engaging and memorable.

14.0126

参考译文:

建筑是设计组织和附上实际空间并且具有象征意义目的结构的艺术科学。因 为建筑增加了人力需求和愿望,它清楚地传达文化价值。在所有的视觉艺术中, 建筑最直接地影响了我们的生活,因为它在主要途径上决定了人文环境的特征。 建筑是一种立体的形式。它利用空间,质量,结构,线,光,和颜色。要建 设就必须实现各种要素工作的和谐。人类本能地谋求能居住和提高他们生 活方 式结构。建筑师的工作创造的建筑物不是单纯的建筑物,还提供了灵感和喜悦。 建筑物有助于人的生命并且经济上是可行的,当它们提供住房,丰富的空间,补 充他们的网站上,适应气候的时候。付建设费用并确定其职能的客户是建筑队的 一个重要成。许多当代建筑的平庸设计可溯源至客户和建筑师。

为了使结构实现规模和强度务必地满足其目的,建筑物采用了支撑方式,因 为他们是基于物理定律,变化不大,自从人们首次发现它们——甚至在建筑材料 发生了巨 大变化的时候。世界建筑结构也已制定有关的客观限制的材料。结构 可以分析他们如何处理由重力产生的向下运动。它们的目的是为了压缩的力量 (推在一起),拉伸(拉动除外),弯曲,或结合这些不同部分的结构。

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甚至建筑的发展已经造成的重大技术变革。材料和建设方法是建筑结构设计 不可分割的组成部分。在较早的时候有必要设计结构系统来适合有效地材料,如 木,石,砖。现今的技术对于有可能创造新的建筑材料来适应期望的结构类型 的观点有进步。材料的巨大变化和过去的几代的建设技术使得可能附上空间 与更大的方便,速度和最少的材料。在这一领域的进展可以被现在修建的建 筑物和那些 100 年前建造的可比的规模的建筑之间的重量差异所衡量。 现代建筑形式相对于人体要素一般有三个独立的组成部分;支撑骨架或框 架,外层皮肤内附的内部空间,设备,类似于人体的重要器官和系统。这些设



备包括管道,电线,热水和空调。当然,在早期建筑物中没有像圆顶箱和土坯结 构这样的设备,但是骨骼和皮肤往往有。许多世界上最伟大的建筑是用石料修建 的,因为它的美丽,持久性,和可用性。在过去,整个城市由切割的艰巨任务和 打桩石经发展起来的。一些世界上最好的石头建筑中可以看到马丘比丘高东部安 第斯 山脉的秘鲁的古代印加城市的遗址。可放置开放空间的梁厚的支撑上面体 重的石头使得门口和窗户都成为可能。结构的发明不得不在物理限制的石头是可 以克服的和 新的建筑形式可以建立的之前。该项发明是拱,弯曲的结构最初由 单独的石头或砖块部分构成。拱被早期文化地中海地区主要的地下水渠所使用, 但它是古罗马人最 先开发的和利用广泛的拱在地上结构的。罗马建设者完善了 由单独的块石组成的半圆形拱。作为跨越空间的一种方式,拱可以比横向束支持 更大的重量。它作用在压 缩转移的重量超过它给双方的,那里的重量被纵向要 素两边的拱所承担。拱之间的许多重要结构突破了整个建筑的特点百年。 拱是 百年来在许多重要结构突破中突出建筑特点的一个。

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第十五篇

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

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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?

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

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

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

OBefore 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

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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:

 $\bigcirc The aquifer stretches from South Dakota to Texas.$

OThe aquifer's water comes from underground springs.

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

OThe aquifer's water is stored in a layer of sandstone.

 $\boldsymbol{3}$. 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.



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

OAlthough 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.

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

O 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

 \bigcirc Initial

OSubsequent

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

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



 \bigcirc To provide another example of how water from the Ogallala has transformed the

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economy of the High Plains

 $\bigcirc \mathsf{To}$ 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

O Difficult to control

OWithout any restriction

○Unlike anything in the past

ORapidly expanding

7. The word "virtually" in the passage is closest in meaning to

OClearly

○ Perhaps



○Frequently

OAlmost

8 . According to paragraph 4, all of following are consequences of the heavy use of the

Ogallala aquifer for irrigation EXCEPT:

OThe recharge rate of the aquifer is decreasing.

 \bigcirc Water tables in the region are becoming increasingly lower.

○Wells now have to be dug to much greater depths than before.

 \bigcirc 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

 $\bigcirc\ensuremath{\mathsf{Has}}$ the greatest amount of farmland being irrigated with Ogallala water

O Contains the largest amount of Ogallala water underneath the soil

 \bigcirc Is expected to face the worst water supply crisis as the Ogallala runs dry

OUses the least amount of Ogallala water for its irrigation needs

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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

OPredictable

OUnavoidable



OFinal

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

OCrops 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.

Olrrigating less frequently often leads to crop failure.

OFew 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?

OThe rivers cannot supply sufficient water for the farmer's needs.

OIncreased irrigation costs would make the products too expensive.

OThe costs of using capillary water for irrigation will increase.



OFarmers will be forced to switch to genetically engineered crops.

Paragraph 5—6: The reaction of farmers to the inevitable depletion of the Ogallala varies.

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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,

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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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Answer choices

OThe use of the Ogallala for irrigation has allowed the High Plains to become one of the most productive agricultural regions in the United States.

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

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

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

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

OSeveral 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:

 $1.\bigcirc$ Before the early 1900's there was only a small amount of farming and



ranching in the High Plains.

2. OThe aquifer's water comes from underground springs.

3. O Despite the current impressive size of the Ogallala aquifer, the region's

climate keeps the rates of water addition very small.

4. OSubsequent

5. OTo provide another example of how water from the Ogallala has transformed

the economy of the High Plains

6. OUnlike anything in the past

7. O Almost

8. OThe recharge rate of the aquifer is decreasing.

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

10. O Unavoidable

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

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

13.〇在 Unfortunately 前加 But even if uncooperative farmers were to join in the

conservation efforts, this would only delay the depletion of the aquifer.

14.0126

参考译文:

枯竭的奥加拉拉蓄水层

19 世纪 80 年代,在广袤的美国中部的高地平原大草原上定居着农民和 大农场主们。这个地区有着半干旱的气候,在人们定居后的 50 年里,它供给了一 个以畜牧业和小麦的耕作为主的低强度农业经济。然而在 20 世纪初,人们发现, 许多高平原之下都蕴藏着巨大的含水层(含有大量地下水的岩层)。这个含水层 因曾经在这里定居过的奥加拉拉苏族印第安人而得名奥加拉拉蓄水层.

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奥加拉拉蓄水层是砂岩结构,在从西北德克萨斯州到南达科塔州的地下 绵延 583000 平方公里.雨水和融雪在 30000 年前开始在奥加拉拉蓄积.有估计指出 该水层的含水量足以填满休伦湖.不幸的是,在目前该地区半干旱的条件下,奥加



拉拉蓄水层的的蓄水能力极低,在一年半厘米左右.

20 世纪 30 年代初期的干旱年代,人们在奥加拉拉打出了第一口井.在接 下来的灌溉农业的快速推广中,特别是 20 世纪 50 年代后期,改变了这一地区的经 济模式.目前在奥加拉拉地区共开凿了 100000 多口井.日喷水量达到 4.5million 升 的现代灌溉设备,创造了一个圆形绿岛植物区为主的景观.奥加拉拉的蓄水保证了 高平原地区对美国棉花,高粱,小麦,玉米的大量供应.此外,百分之四十的美国 谷物喂养肉牛在这里育肥.

这种前所未有的发展,有限的地下水资源和可以几乎忽略的自然补水速 度.事实上根本没有天然水资源去补充供水.已经引起了该地区地下水位的急剧下 降.在 20 世纪 30 年代,井深 15 米就可以达到丰富的水资源.而现今则必须挖掘到 45-60 米甚至更多.在一些地区,地下水位的下降速度甚至达到了每年 1 米,迫使人 们周期性的加大井深并使用更加强力的抽水机.按现今的下降率估计,大多数的地 下蓄水将在 40 年后耗尽.这种现象在气候最为干旱德克萨斯州最为严重.大量的 水被从地下抽起,蓄水层含水量最为稀少.预期估计,到 2030 年,德克萨斯州余下的 奥加拉拉蓄水只能支持 1980 年灌溉英亩数的的 30%-40%.

农民们对不可避免的奥加拉拉蓄水层枯竭的反应各不相同,许多人已经 开始尝试通过减少灌溉频率,改种需水较少的庄稼来节约水资源.然而另外一些人 却抱着趁水资源还能产生经济效益就应抓紧利用的想法,并一直种植高价的棉花 等农作物.当知道他们的邻居们通过大量用水种植盈利的时候,那些想节水的农民 的热情降低了,这种情形导致了整个地区的水供应的减少.

在即将到来的水资源供应危机面前,一些试图通过运河或管道将密西西 比河,密苏里河或者阿肯色河的水力运输过来的宏伟计划被提了出来.然而不幸的 是,通过以上任何一种获得水资源的计划都会将抽水的成本提高十倍以上.进而导 致这一地区的灌溉农业产物的成本在国内和国际市场上都毫无竞争力.最近一些 更有希望的试验通过向土壤中注入压力将毛细管水(土壤中的水)释放到地下水 位上.即使这样行之有效,也会将水资源的花费变到 3 倍.通过新品种耐寒作物的继 续研发,基因工程也会帮助解决部分难题.不论这次水资源危机的最终结果如何, 很显然,在高平原地区,灌溉水资源再也不会象 20 世纪中期农业繁荣时期的那样



充足并且廉价了.

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第十六篇

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

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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

ONatural

○Final

○ Specific

○ Complex

2 . According to paragraph 1, which of the following is NOT true of climax communities?OThey occur at the end of a succession.

OThey last longer than any other type of community.

OThe numbers of plants in them and the mix of species do not change

OThey 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

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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?

OEcosystem properties change more slowly than individuals in the system.

OThe stability of an ecosystem tends to change as individuals are replaced.

 \bigcirc Individual organisms are stable from one year to the next.

OA 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?

OPioneer communities

OClimax communities

○Single-crop farmlands

OSuccessional 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?OThe reasons for ecosystem change are not always clear.

CEcologists 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.

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6 . According to paragraph 4, which of the following is true of climax communities?OThey are more resilient than pioneer communities.

OThey can be considered both the most and the least stable communities.

OThey are stable because they recover quickly after major disturbances.

OThey 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?

OThey become less stable as they mature.

OThey support many species when they reach climax.

OThey are found in temperate zones.

OThey have reduced diversity during mid-successional stages.

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

OIncrease

OEnsure

○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)"?

OTo 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

OTo 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

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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



\bigcirc Differs

○Loses significance

Ols 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

 \bigcirc 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 127

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

OThe 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.

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



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

ODisagreements over the meaning of the term "stability" make it difficult to identify the most stable ecosystems.

 \bigcirc The resilience of climax communities makes them resistant to destruction caused by

humans.

参考答案:

1. O Specific

2. OThe numbers of plants in them and the mix of species do not change

3. OA change in the numbers of an organism does not affect an ecosystem' s

properties

4. Climax communities

 $5.\bigcirc$ The exact meaning of the word "stability" is debated by ecologists.

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6. OThey can be considered both the most and the least stable communities.

7. OThey become less stable as they mature.

8. CEnsure

9. OTo illustrate a general principle about the stability of systems by using an

everyday example

10. O Loses significance

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

12. O Neighboring

13.〇在 The destruction 前加 In fact, damage to the environment by humans is often much more severe than damage by natural events and processes.

14.0234

参考译文:

长期稳定的生态系统

植物群落组织他们自己是较为灵活的,而且其特殊的结构依赖于具体的历史



地区。生态学家使用"继承"来指植物群落和生态系统随着时间推移时所发生的变 化。第一,群落在继承称作先锋群落,而长期生存的群落至结束的继承被称为项 极群落。这两种植物群落演替变化周期是从 1 到 500 年。这些变化的植物数量和 混合种是累积性渐增的。顶极群落本身的变化时段差不多大约 500 年。 一个生态学家在研究一个池塘时找到了它现今相对不变是在一年的时间。 个别鱼类可能被替换,但大多鱼类将趋于同一样从一年到下一年。我们可以说, 性质、性能是与个别生物体相比,能较为稳定的组成生态系统。 有一段时间,生态学家认为,物种的多样性造成了生态系统的稳定。他们认

为,更大的多样性能更稳定生态系统。支持这个想法来看,长期持久的顶极群落 要比先锋群落通常有更为复杂的食物网和更多的物种多样性。生态学家得出的结 论,这种显然的稳定性是源于顶点生态系统依赖于他们的复杂性。采取极端的例 子,农为主的单一作物是如此不稳定的在一年中的恶劣天气或入侵一个单一的害 虫就可以摧毁整个作物。与此相反,一个复杂的顶极群落,如温带森林,不会容 许来自天气的害虫使之造成相当大的损害。

不管怎样问题是生态系统的稳定是复杂的。第一个问题是,生态学家不同意 什么"稳定"的手段(定义)。稳定性可以被界定为简单缺乏变化。如果是那样的 话,顶极群落将被视为最稳定的,因为根据定义,它的改变至少随着时间的推移。 另外,稳定的可以被界定为加快了生态系统返回到一种特定形式下的一个重大障 碍,如火灾。这样的稳定也被称为弹性。在这种情况下,顶极群落将是最脆弱和 最稳定的,因为他们可能需要数年时间才能恢复到顶点状态

即使是这样的稳定,定义为简单缺乏变化并非总是与最大多样性有联系。至 少在温带地区,最大的多样性往往是发现在演替阶段中,而不是顶极群落。一旦 129

红杉森林成熟,例如,各种物种和一些个别的成长的林地减少。一般而言,多样性,本身并不能保证稳定。数学模型的生态系统也表明,多样性并不能保证生态 系统的稳定,正好相反,在事实。一个更复杂的系统,一般来说,更有可能比一 个简单的系统损坏。 (十五高速赛车更有可能比孩子的三轮车发生故障。 生态学家特别兴趣知道哪些因素有助于促成群落的恢复,因为项极群落在世



界各地都受到人类活动的严重损坏或毁坏。所造成的破坏原因有火山作用引起的 爆炸的圣海伦火山,在美国西北部,例如,巴勒斯坦所造成比较具破坏性的人类。 我们需要知道哪些方面是比较重要的社会对群落的破坏,以及它的复苏。 许多生态学家认为,现在的相对长期稳定的顶极群落并非来自多样性,但对 环境有"补缀性",一种环境,不同地点比周围环境支撑更多种类的有机体,即是 统一的。当本地居民被相邻群落的移民迅速取代而消逝。即使新的人口是一个不 同的物种,它可以大约填补消逝人口的市场空缺和保持完整的食物网

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第十七篇

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

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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

- \bigcirc extend
- \bigcirc transform
- \bigcirc activate
- waste
- 2. The word none in the passage refers to
- \bigcirc food



- \bigcirc plant or animal
- \bigcirc energy
- \bigcirc big body
- 3. In paragraph 1, the author explains the concept of energy expenditure by
- \bigcirc identifying types of organisms that became extinct
- O comparing the scientific concept to a familiar human experience
- \bigcirc arguing that most organisms conserve rather than expend energy
- O describing the processes of growth, reproduction, and metabolism
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- 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

- O how the genetic information of an organism is stored and maintained
- \bigcirc the way in which the organism invests its energy resources
- \bigcirc whether the climate in which the organism lives is mild or extreme
- O 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
- \bigcirc development
- \bigcirc growth
- \bigcirc distribution
- \bigcirc 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.

O 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.

 \bigcirc 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.

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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
- \bigcirc ancient
- \bigcirc common
- \bigcirc successful

8. All of the following are mentioned in paragraph 7 as contributing to the

longevity of an oak tree EXCEPT

- \bigcirc the capacity to create shade
- leaves containing tannin
- the ability to withstand mild droughts and fire
- \bigcirc the large number of acorns the tree produces
- 9. According to the passage, oak trees are considered competitors because



- \bigcirc they grow in areas free of opportunists
- O they spend more energy on their leaves, trunks and roots than on their acorns
- their population tends to increase or decrease in irregular cycles
- O unlike other organisms, they do not need much water or sunlight
- 10. In paragraph 7, the author suggests that most species of organisms
- \bigcirc are primarily opportunists
- \bigcirc 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

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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. **Answer Choices Opportunists** 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 Competitors 135 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.O energy 3.O comparing the scientific concept to a familiar human experience 4. O the way in which the organism invests its energy resources 5.O distribution


6. O Because their seeds grow in places where competing plants are no longer

present, dandelions are classified as opportunists.

7.O huge

8.O the large number of acorns the tree produces

9. OThey spend more energy on their leaves, trunks and roots than on their

acorns

10. O have some characteristics of opportunists and some of competitors

11.〇 在 If their population 前加 Such episodic events will cause a population

of dandelions, for example, to vary widely.

12. Opportunists:

Succeed in locations where other organisms have been removed

Have populations that are unstable in response to climate conditions

Reproduce in large numbers

Have relatively short life spans

Competitors:

Have mechanisms for protecting themselves from predation

Invest energy in the growth of large, strong structures

Produce individuals that can withstand changes in the environmental

conditions

参考译文:

生长,繁殖,和每日新陈代谢都依赖于一个有机体消耗能量。能量的消耗根

本上是一个预算安排的过程,就如财政预算。如果一个人所有的钱都用来买衣服,

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就可能没有余下的钱购买食物或去看电影。同样,植物或动物,不能浪费其所有 的能量来生长一个庞大的身体如果其没有留下能量用于繁殖,因为这样确信无疑 会走向灭绝。

因此,所有生物体分配能源用以生长,繁殖,保养和储存。没有一个选择是 混乱的,这种分配方式是来自上一代的遗传基因的一部分。保养对于一个生物体



特定的身体设计是相对恒定的。储存是很重要的,但最终能量将被用于保养,繁 殖或生长。因此,主要的能量分配上的主要不同很可能在生长和繁殖之间。 几乎一个生物体所有的能源都可以转向用于繁殖,很少分配给身体的生长。在这 个极端的生物体是"机会主义者"。在另一个极端是"竞争者",几乎其所有的资 源都用于生长一个庞大的身躯,而最低限度的用于繁殖。

蒲公英是"机会主义者"的很好的例子。他们的籽头刚好生长到高出地面并足 够接触到风的高度,他们的重量正好是他们所需要的,他们的茎是中空的,他们 全部的硬度来自于其水分的含量。因此,对于身体的最低限度的能量的分配,使 其成为一个散布种子的平台。这些寿命很短的植物大量繁殖;这就是说,他们在 母体的周围不断的提供种子。新的植物会迅速生长,当种子落在一个合适的土壤 表面,但是因为他们并不生长很大的的身躯,他们无法与其他植物竞争空间,水, 或阳光。这些植物被称为机会主义者,因为他们依靠其种子落入某些地方,在这 些地方与其竞争的植物由于某些自然过程而远离开来,如被侵蚀河岸,山崩之处, 或在由于树倒下而在森林冠层中形成的间隙。

机会主义者必须不断进入新的领域,以补偿由更具竞争力的物种带来的淘 汰。人类草坪,牧场,或花圃提供的裸土和缺乏竞争对手的环境对于"机会主义 者"来说是完美的栖息地。因此,许多坚强的机会主义植物是我们牧场和花园中 常见的杂草。

因为每个个体的寿命是短暂的,机会主义植物物种的数量很可能受到干旱, 恶劣的冬天,或洪水的不利影响。如果它们的数量被跟踪一段时间后,就会发现 特别不稳定-在不规则周期内飙升和暴跌。

与机会主义者相反的是竞争者。这些生物体往往有很大的身体,寿命长,并 且每年花相对较少的努力在繁殖上。橡树是"竞争者"的一个很好的例子。一颗巨 大的橡树要占据它的领地 200 年甚至更久,以制造浓密的树荫和吸收所有土壤中 多余的水分的方法驱逐所有可能的林冠树木。橡树树叶的味道很臭,因为其含有 丰富的丹宁酸,一种使很多生物体味道不佳或难以消化的化学物质。丹宁酸,是 对长寿命很重要的防卫机制的一部分。虽然橡树产生数以千计的橡子,但是对于 大量的橡子的能量投入比起用于树叶、树干和根部生长的能量来说是很小的。一



旦橡树长成,它很容易在小周期的干旱甚至火灾中存活。橡树的数量在长时期内 是相对稳定的,并且它的生存可能更多地取决于它承受竞争或掠食压力的能力, 而不是它利用偶然事件的能力。然而,应当指出,单纯机会主义者或纯竞争者在 自然界中是少见的,因为大多数的物种属于两个极端之间的一个连续体,表现出 融合了一些机会主义者和一些竞争者的特点。

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第十八篇

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

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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

Ochambers



\sim			
()	nair	1tinac	
U	vali	ILIIISS	
		. 0.	

 \bigcirc beasts

 \bigcirc parades

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

OWays

OShades

OStages

 \bigcirc Rules

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

 \bigcirc Wild animals sometimes lived in the cave chambers.

OArtists painted pictures on both walls and bones.

OArtists ground them into a fine powder to make paint.

OArtists 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?

OThey also painted rocks outside caves.

OThey did not live close to the cave entrances.

OThey developed their own sources of light to use while painting.

OTheir 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?

OTo present a common opinion held by many scholars

OTo suggest a similarity between two opinions held by scholars

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OTo suggest a possible explanation for a weakness in an opinion expressed in the

passage

OTo 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

Orepresented

Odeveloped into

 \bigcirc were associated with

○came after

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

hunting?

OBecause some tools used for painting were also used for hunting

OBecause cave inhabitants were known to prefer animal food rather than plant food

OBecause some of the animals are shown wounded by weapons

OBecause 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 141

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?

 \bigcirc To explain the state of consciousness the artists were in when they painted their

pictures

OTo demonstrate the mythical significance of the strange geometric shapes

OTo indicate that trance states were often associated with activities that took place inside caves

 $\bigcirc \mathsf{To}$ 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

O to look like an animal while a hunt took place

Oto frighten off other hunters competing for food

Oto prove that he is not a shaman

Oto 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?

OKeeping the paintings a mystery will increase their importance.



OThe artists hid their tools with great intelligence and skill.

OToo many years have gone by since the images were painted.

OAnswering 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

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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. 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. The human figures represented in the paintings appear to be less carefully shaped than those of animals. Some scholars believe that the paintings motivated hunters by allowing them to picture a successful hunt. It is possible that the animals in Scientific analysis suggests that 143 the paintings were of mythical significance to the tribe, and the paintings reflected an important spiritual practice. 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.O beasts

2. Ways



- 3. O Artists developed special techniques for painting the walls.
- 4. O To contrast the location of their rock paintings to those found at Lascaux
- 5. O They developed their own sources of light to use while painting.
- 6. O To suggest a possible explanation for a weakness in an opinion expressed

in the passage

- 7. \bigcirc were associated with
- 8. O Because some of the animals are shown wounded by weapons

9. OTo give a possible reason for the strange appearance of the men painted on the cave walls

10. O to look like an animal while a hunt took place

11. \bigcirc Too many years have gone by since the images were painted.

12.〇在 Cave paintings 前加 This made it easy for the artists to paint and display them for the rest of the cave dwellers.

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

Some scholars believe that the paintings motivated hunters by allowing

them to picture a successful hunt.

It is possible that the animals in the paintings were of mythical significance

to the tribe, and the paintings reflected an important spiritual practice.

参考译文:

Lascaux Cave Paintings

在 1940 年的法国的西南部,玩耍中的孩子发现了 lascaux 石窟,一系列的狭窄的 石洞房间包含有庞大的史前动物题材绘画。这其中的许多禽兽有 16 英尺(几乎 5 米)。其中一些禽兽跟随着彼此庄严的游行,但其它的在四周和一侧混乱的旋 转着。这些动物是公牛队,野马,驯鹿,野牛,和猛犸,用木炭画出轮廓,并且 大部分用红色、黄色和棕色来绘画。科学分析表明,颜色来自黄土和其他氧化铁 制成的粉末。运用颜色方法多种多样:一些颜色被刷或涂在岩石表面,其他是吹 制或喷涂的。很有可能用动物骨骼制成的软管被用于喷洒,因为空心的骨骼,一



些染有色素,在附近被发现。

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其中最令人费解的方面是绘画的位置。其他岩画-举例来说,南非的那些丛林人-要么位于洞穴入口的附近,或完全在野外。然而,法国和西班牙的洞穴画,在远 离洞穴最初入口的壁凹和洞穴中。这意味着艺术家被迫在狭小和没有自然光来源 的地方工作。它还意味着,无论是谁创造了它们,都不希望它们能够很容易被找 到。由于洞穴居民经常生活在靠近洞穴入口处,因此必定有一些原因,使许多世 代的 lascaux 洞穴居民隐藏他们的艺术。

学者们提出了三个相关但不同的,关于这些画的神秘的起源和意义的意见。一种 看法是,这些绘画是对畜群的季节性迁徙的记录。因为有些画是擦掉一些画并直 接画在上面,很有可能一幅画的价值随着它所描绘的迁徙的结束而结束。不幸的 是,这一解释未能解释地点的隐藏,除非迁徙是以秘密的仪式庆祝的。

另一种意见是,画与狩猎有直接关系,并且是一种特别筹备仪式的一个重要组成 部分。这个意见认为,图片和他们伴随的各种仪式,是一种古老的心理激励猎人 的方法。可以想象的是,猎人狩猎之前会画出或研究动物的图像并且设想一个成 功的狩猎。这种看法得到相当多的支持,因为图片中的一些动物被箭或矛击伤。 这个意见也试图解释覆盖式的绘画说,一种动物的图片在狩猎后就没有用了。 第三个意见,把心理动机进一步融入部落的仪式和神秘中:相信某些动物拥有神 话般的重要性,是某个特定部落或是组的古老的祖先或守护神。两种类型的图像 证实这一理论:在动物附近吃显得一些奇怪的、难以辨别的集合图形,和少数男 子的图像。只要男子的图像出现,都是粗乱所画并且男子的身体都被加长和僵化。 有的男子为卧姿,有的男子有鸟或动物的头像。这个意见的支持者指出一份报告, 这份报告来自于一些经历过走神状态的人们,这是一种很强的暗示处于清醒和睡 眠之间的低意识的状态。非常一致的,这些人感到了失重状态和身体被拉长的感 觉。支持者还指向那些相信自然的力量是存在于精神之中的人,特别是巫师,他 们相信动物的精神和能源可以在出神的状态时移交给他们。一幅 lascaux 叙事性 的,描绘了一个拥有鸟形头的男子和一个受伤的动物的图片,被认为可以增加第 三种观点的可信度,但仍有很多不可解释的地方。举例来说,证明画中男子是巫



师的证据在哪里?他可以很容易被作为一个带着面具的猎人。许多部落的猎人, 包括一些土著美洲人,身着动物的头和兽皮来伪装自己。 也许这么多时间过去了,永远不会有对于这些洞穴团的令人满意的答案,但他们 的神秘感只会增加其重要性。当然一个伟大艺术的存在,且由它的存在表明,古 代人不是没有智慧、技术和感情的。

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第十九篇

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

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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?

OArms using windmills to pump water

O Research centers exploring the uses of wind

OTypes of power plant common in North Dakota

OCollections 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

 \bigcirc use

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Orequire

 \bigcirc release

Odestroy

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?

OThey rely largely on coal-fired power plants.

OThey 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?

OThese periods are times when wind turbines are powered by hydrogen gas.

OThese periods provide the opportunity to produce and store energy for future use.

OThese periods create storage problems for all forms of power generation.

OThese 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

Opower does not reach all customers

⊖wind farms cannot be used

 \bigcirc solar power is more appropriate

Obackup systems are needed

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6. According to paragraph 4, what can be inferred about the problems of visual pollution and noise associated with wind farms?

OBoth problems affect the efficiency of wind farms.

OPossible solutions are known for both problems.

 \bigcirc Wind power creates more noise than visual pollution.

OPeople 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

Ointerference with the flight patterns of migrating birds in certain areas

Obuilding ridge lines that are ideal for wind turbines

Othe killing of birds of prey by wind turbines

Omeeting 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.

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

OWind 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.



OLarge wind farms in certain areas kill hawks, falcons, and eagles and thus might create a more ideal path for the flight of migratory birds.

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9. In paragraph 5, why does the author give details about the estimated numbers of birds killed each year?

OTo argue that wind farms should not be built along ridge lines

OTo point out that the deaths of migratory birds exceed the deaths of birds of prey

OTo explain why some environmentalists oppose wind energy

OTo suggest that wind turbines result in relatively few bird deaths

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

 \bigcirc can identify

 \bigcirc change

 \bigcirc are reduced by

 \bigcirc 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

 \bigcirc estimate

Orespond

 \bigcirc argue

 \bigcirc plan

12. Which of the following statements most accurately reflects the author's opinion about

wind energy?

OWind energy production should be limited to large wind farms.

OThe advantages of wind energy outweigh the disadvantages.

 $\bigcirc \mathsf{The}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{make}\ \mathsf{wind}\ \mathsf{energy}\ \mathsf{safe}\ \mathsf{and}\ \mathsf{efficient}\ \mathsf{will}\ \mathsf{not}\ \mathsf{be}\ \mathsf{ready}\ \mathsf{until}\ \mathsf{the}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{make}\ \mathsf{wind}\ \mathsf{energy}\ \mathsf{safe}\ \mathsf{and}\ \mathsf{efficient}\ \mathsf{will}\ \mathsf{not}\ \mathsf{be}\ \mathsf{ready}\ \mathsf{until}\ \mathsf{the}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{make}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{technology}\ \mathsf{technology}\ \mathsf{to}\ \mathsf{technology}\ \mathsf{technology}\$

middle of the twenty-first century.

OWind 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

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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.

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

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Wind power has several advantages, such as low pollution and projected cost declines, compared to other energy sources. Although wind power is not economical in areas with steady winds, alternative wind sources can be used to

simulate wind power.

Responding to environmentalists

concerned about birds killed by wind

turbines, analysts point to other

human developments that are even

more dangerous to birds.

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. O Collections of wind turbines producing electric power

2.O release

- $3.\bigcirc$ They contain remote areas where the winds rarely die down.
- 4. O These periods provide the opportunity to produce and store energy for future

use.

- 5. O backup systems are needed
- 6. O Possible solutions are known for both problems.
- 7. O 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. OTo suggest that wind turbines result in relatively few bird deaths
- 10. Ototal

11. Oestimate

12. The advantages of wind energy outweigh the disadvantages.

13. 〇在 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. OWind 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.

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参考译文:



自 1980 年以来,利用风力生产电力已迅速增长。在 1994 年世界各地有近 2.0 万风力涡轮机,大部分集中在一起称作风力农场,集体生产 3000 兆瓦的电力。 大部分都是在丹麦 (3%的电力来自风力涡轮机)和加利福尼亚州 (其中 17000 台机器生产的国家 1 % 的电力,足以满足一个如旧金山大的城市的住宅需 求) 。基本上,全美国的电力需求都可以通过挖掘北达科他州,南达科他州和 得克萨斯州的潜在风力发电来提供。

大型风力发电场可在 6 个月至一年内建成,然后轻易按照需要扩大。由于相 当高的能源净利润的中和,这些系统没有排放二氧化碳或其他空气污染物,无须 水冷却;制造他们产生很少的水污染。风力涡轮机下的土地可用于放牧牛和其他 用途,租赁土地给风力涡轮机可以为农民和牧场主提供额外的收入。

风力发电有一个显著的超过核电的成本优势,并已在许多地方与燃煤电厂展 开竞争。随着新技术的进步和大规模生产,预计成本下降会使风力发电成为世界 上最便宜生产电力的方法。在长远来说,偏远地区的大型风力发电场的电能可以 在低于高峰期用电需求的时期用于用水来制造氢气。氢可以放入入存储系统,在 需要额外和后备电源时用来发电。

在风源稳定的地区,风力发电是最符合经济效益的。在风源减少的地方,来 自公用事业公司和能量储存系统的后备能源就变得很必要。后备能源也可以由连 接的拥有太阳能电池、传统的或抽水蓄能水电站、或有效率的自然燃气涡轮机的 风力发电厂来提供。风力发电场的一些缺点,包括视觉污染和噪音,虽然这些是 可以通过改善他们的设计和安排在偏僻地区来克服的。

大型风力发电场也可能干扰某些领域的候鸟的飞行方式,他们杀害了大型猛 禽(尤其是鹰派,猎鹰,鹰),这些猛禽喜欢沿那些风力涡轮机理想地点的山脊 线捕食。风力涡轮机杀害猛禽使主张保护野生动物的环保主义者和主张发展再生 能源的环保主义者互相斗争。研究人员正在评估这个问题的严重程度,并希望能 找到办法来消除或大幅度减少这个问题。一些分析家还认为,由风力涡轮机导致 的鸟类的死亡数目和由其他人为原因造成的死亡数目以及整个鸟类在全球变暖 中的死亡数目相比是相形见绌的。美国风力发电厂中猛禽和其他禽鸟的死亡记录 显示每年不超过 300 只。相比之下,在美国估计每年有 9700 万禽鸟由于碰撞到 建筑物的厚玻璃板而死亡,每年 5700 禽鸟死在高速公路上,每年至少有 380 万 禽鸟死于污染和中毒,每年数以百万计的禽鸟在燃煤电厂和核电厂的输电和配电 线缆上触电致死。

技术促进了世界范围内的风力发电的主要扩展。风力发电在有利的地点是一 个几乎无限的能量来源,即使不包括环境敏感地区,全球潜在风力发电远远高于 目前的世界总电力的使用。在理论上,阿根廷,加拿大,智利,中国,俄罗斯和 美国,英国可以利用风力来满足他们所有的能源需求。风力发电专家估计,在二 十一世纪中叶,风力发电可提供 10 %以上的世界电力和 25%的美国电力。

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第二十篇

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),

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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?

 \bigcirc 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.

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

 \bigcirc 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
- $\, \bigcirc \,$ cause some deer to hibernate
- $\, \odot \,$ make food unavailable in the highlands for deer
- O make it easier for deer to locate understory plants
- prevent deer from migrating during the winter

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- 3. The word "inhibits" in the passage is closest in meaning to
- \bigcirc consists of
- \bigcirc combines
- \bigcirc restricts
- \bigcirc 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
- \bigcirc impatiently
- \bigcirc humorously
- \bigcirc 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?

OThe number of deer within the Puget sound region has varied over time.

O Most of the explorers who came to the Puget sound area were primarily interested than in the West.

OThere was more game for hunting in the East of the United States than in the West.

O 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?

OThe fort had become the headquarters for the Hudson's Bay Company.

ODeer had begun populating the meadows around the fort.



 $\bigcirc\ensuremath{\mathsf{Deer}}$ populations near the fort had been destroyed.

OCrop yields in the area around the fort had decreased.

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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?

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

OTo 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

OTo 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

 \bigcirc whose importance remains unknown

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

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

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

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

OSince 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

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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

- \bigcirc decline
- \bigcirc recovery



- \bigcirc exchange
- \bigcirc 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.

OArthur Einarsen's longtime family with the Pacific Northwest helped him discover

areas where deer had an increase in suitable browse.

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

 $\bigcirc\ensuremath{\mathsf{Biologist}}$ like Einarsen believe it is important to find additional open areas with

suitable browse for deer to inhabit.

OAccording 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?

OA reduction in the number of predators

○ Restrictions on hunting

○The effects of logging and fire

OLaws 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

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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

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.

O 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.

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 \bigcirc 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.

O 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.

 \bigcirc 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.

 $\, \odot \,$ Wildlife biologists have long been concerned that the loss of forests may create

nutritional deficiencies for deer.

参考答案:

1. OIt no longer lives in a particular type of habitat that it once occupied.

2. O make it easier for deer to locate understory plants



- 3.O restricts
- 4.O Immediately

5. OThe number of deer within the Puget sound region has varied over time.

6. ODeer populations near the fort had been destroyed.

7. OTo provide support for the idea that habitat destruction would lead to

population decline

 $8.\bigcirc$ whose end has not been determined

9. OThe activities of settlers contributed in unexpected ways to the growth of

some deer populations in later times.

10.O recovery

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

12. O Laws that protected feeding grounds of deer

13.〇在 Even with 前加 There food is available and accessible throughout the winter.

14.0235

参考译文:

位于太平洋西北区的美国华盛顿州的普及特海域内有两种鹿很普遍。目前最 为常见的是黑尾鹿,它生活在低地部,是华盛顿东部长耳鹿在西部的表亲。另一 个品种,哥伦比亚白尾鹿,之前在开阔草原很常见,现在则限制在低的沼泽森林 地带和哥伦比亚河下游的河滩地区。

几乎任何森林中的地被层植物都可以成为鹿的食物的一部分。在森林里抑制 草和其它草地植物的地方,越橘,北美白珠树,多花梾木和几乎所有其它的灌木 和草都会是黑尾鹿的食物。但这只是在好天气的时候。黑尾鹿是怎样在严酷的植 物衰败和冬眠期生活的?度过冬眠期的唯一办法必须迁徙。鹿在冬季会迁徙到高 海拔地区直到夏天的到来再迂回低地。甚至地面有大雪的覆盖,在高地有着灌木 丛生的地被层植物,而且雪和风会打落雪松,铁衫,红桤木和其它树的树枝和叶

子。



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第二十一篇

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

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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

Osurprising

Olimited

Oadequate

2. Paragraph 1 supports which of the following statements about painting in Europe?

Olt is much older than painting in Australia.

 \bigcirc It is as much as 28,000 years old.

Olt is not as old as painting in southern Africa.

 \bigcirc 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.

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3. The word "principal" in the passage is closest in meaning to

 \bigcirc major

Olikely

Owell protected

 \bigcirc distinct

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

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

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

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

OThe 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

 \bigcirc conditions

○ problems

 \bigcirc influences

Odecorations

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.

OUpper Paleolithic people, like many contemporary peoples, believed that if they drew a human image in their cave art, it would cause death or injury.

OMany 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

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art.

OIf 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.

OAlthough 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



OUpper Paleolithic artists used marks to record the animals they had seen

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

Othe artists had removed rough spots on the cave walls

OUpper 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"?

 $\bigcirc \mathsf{To}$ 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

 $\bigcirc\ensuremath{\mathsf{To}}$ emphasize the continued improvement in the quality of cave art throughout the

Upper Paleolithic period

 $\bigcirc\ensuremath{\mathsf{To}}$ 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

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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:

OThese animals were difficult to hunt because their unpredictable behavior.

OPeople preferred these animals for their meat and for their skins.

OThe painters admired the beauty of these large animals.

OPeople 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?

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

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

OHunters preferred the meat and hides of deer and reindeer to those of other animals.OHunters 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?



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

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

 \bigcirc This new art no longer consists mostly of representations of animals.

OThis 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

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their environment?

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

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

OTheir figurines represented the human female in exaggerated form.

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



O 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.

OSome 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.

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

OSome researchers have argued that the cave paintings mostly portrayed large animals

that provided Upper Paleolithic people with meat and materials.

 $\bigcirc\ensuremath{\mathsf{Besides}}$ 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:

 $1.\bigcirc$ considerable

2. OIt is as much as 28,000 years old.

3. Omajor

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

5. Odecorations

6. OUpper Paleolithic people, like many contemporary peoples, believed that if they drew a human image in their cave art, it would cause death or injury.

7. OUpper 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. OThe painters admired the beauty of these large animals.

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

11. OThis new art no longer consists mostly of representations of animals.



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

13.〇在 were decreasing 后加 Therefore, if the paintings were connected with hunting, some other explanation is needed.

14.0156

参考译文:

欧洲洞穴岩壁艺术

珠链和雕刻是迄今为止被发现的最早的并且有迹可寻的艺术,接着就是绘 画,在可追溯至后期旧石器时代的遗址上发现了它。我们可以认为早期的艺术成

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就都是不成熟的,但西班牙与法国南部的洞穴岩壁画已经明显有了高程度的技艺。在非洲南部发掘出的自然的石板画也是这样。其中的一些石板画看起来是 28000 年前画出的,暗示着非洲绘画与欧洲绘画是同一时间出现的,但绘画可能 更早些。至少 30000 年前,也可能追溯至 60000 年前,澳洲人就已经在岩石遮蔽 的墙上和悬崖断面上作画了。

调查员 Peter Ucko 和 Andree Rosenfeld 确定了三处东欧洞画的主要地点:

(1),在明显有遮蔽可用来居住的的岩石和洞穴入口处。(2),在居住的洞穴一出门的走廊上以及(3),在洞穴所能及的最深处,有人把继续往里走的困难 在那解释出来,作为巫术-宗教活动曾在这里进行的标志。

绘画的主题大部分都是动物。这些画以空白的墙面为依托,没有任何背景和 环境装饰。或许,同许多其他同时代的人一样,后石器时代的人们也相信,画人 物像会引起伤害性的死亡。如果这确实是他们的信念,那就解释了为什么在洞穴 绘画中人物题材很少被涉及。对于主要画动物的另一个解释是,人们在探索如何 提高打猎的命中率。墙上所画的动物身上有一些缺口,可能是原始人向它们扔矛 时留下的,这个证据也说明了以上一点。但如果提高打猎命中率真的是岩壁画的 主要动机,那么就很难解释为什么只有少数画上有被矛戳过的痕迹。或许它们是 被增加动物数量的需要驱使着画出来的。看起来在后期旧石器时代,猎群数量减 少的时,洞穴绘画达到了顶峰。

也许研究者 Patricia Rice 和 Ann Paterson 所做研究的结果更清楚地揭示了



法国东南部的洞穴绘画的特殊象征性意义。研究显示,可食用的动物或可用来作 兽皮的动物是洞穴绘画的经常被描绘的动物。比如,野牛(牛)和马比我们预料 的要经常出现,可能因为它们比其它动物更大更沉(肉更多)。另外,画作中主 要描绘了绘画者害怕的动物,它们的体形、速度、与生俱来的武器如长牙和角, 以及它们行为的不可预知性都令绘画者感到恐惧。于是,比起鹿和驯鹿来,猛犸、 牛和马被经常描绘。因此,在后旧石器时代人的经济中,艺术与打猎的重要性有 关,这些画作与这个观点不一致。看起来接下来的后旧石器时代文化期的艺术也 反映了人们如何得到食物,根据调查者的研究,这一事实也与前文的想法一致。 但在那个时期,当获得食物不再依附于猎取大型群体动物时(因为它们开始变得 稀少),岩壁艺术便不再以描绘动物为主了

后期旧石器时代的艺术不仅局限于洞穴绘画了。很多矛杆和与其类似的东 西上都画了动物作为装饰。人类学家 Alexander Marshasck 对后旧石器时代时期 的一些雕刻品有一个有趣的解释。他认为在公元前 30000 年, 猎手可能使用了 一种刻在骨头或石头上的标志法来标记不同时期的月亮。如果此论述是真的, 这 就意味着后旧石器时代的人们已经有了复杂的思维并对他们的环境有了一个理 性的认识。除了其它的艺术作品,还在后期旧石器时代的遗址上发现了以夸大的 形式描绘妇女的小雕塑。这也暗示了这些小雕塑是一种理想的形式或者对于理想 产出的表达。

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第二十二篇

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

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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

 \bigcirc grow up

⊖build up

 \bigcirc spread out

Obreak apart

According to paragraph 1, which of the following is true about petroleum formation?
 OMicroscopic organisms that live in mud produce crude oil and natural gas.

OLarge amounts of oxygen are needed for petroleum formation to begin.

OPetroleum is produced when organic material in sediments combines with decaying marine organisms.

OPetroleum 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 170

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

 \bigcirc describe how petroleum is formed

Oexplain why petroleum formation is a slow process

Oprovide evidence that a marine environment is necessary for petroleum formation

Oshow 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.

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

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

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

OThe 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.

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

Onearby

Oexisting

 \bigcirc special

 \bigcirc deep

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

OThey make bringing the oil to the surface easier.

OThey signal the presence of huge oil reserves.

OThey waste more oil than they collect.

OThey 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?

ODrilling under the ocean's surface

OLimiting drilling to accessible locations

○Using highly sophisticated drilling equipment

OConstructing technologically advanced drilling platforms

8. What does the development of the Alaskan oil field mentioned in paragraph 4

demonstrate?

OMore oil is extracted from the sea than from land.

ODrilling for oil requires major financial investments.

OThe global demand for oil has increased over the years.

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OThe North Slope of Alaska has substantial amounts of oil.

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

Oshifting

Oinclining

Oforming

 \bigcirc 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

 $\bigcirc\ensuremath{\mathsf{permission}}$ to access the area where oil has been found

Othe availability of sufficient quantities of oil in a pool



Othe location of the market in relation to the drilling site

 $\bigcirc\ensuremath{\mathsf{the}}$ 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

 \bigcirc reach

 \bigcirc flood

Opollute

 \bigcirc alter

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

Oprovide examples of how oil exploration can endanger the environment

Odescribe accidents that have occurred when oil activities were in progress

Ogive an analysis of the effects of oil spills on the environment

Oexplain 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. \blacksquare 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.

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

OPetroleum formation is the result of biological as well as chemical activity.

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

OPetroleum extraction can have a negative impact on the environment.

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



OCurrent methods of petroleum extraction enable oil producers to recover about half of

the world's petroleum reserves.

OAccidents involving oil tankers occur when tankers run into shore reefs or collide with

other vessels.

参考答案:

1. Obuild up

 $2.\bigcirc$ Petroleum formation appears to begin in marine sediments where organic matter is

present.

- 3. Odescribe how petroleum is formed
- 4. O Increase pressure and heat from the weight of the sediment turn the organic remains

into petroleum.

5. Onearby

- 6. OThey are unlikely to occur nowadays.
- 7. ODrilling under the ocean's surface

8. ODrilling for oil requires major financial investments.

- 9. Oinclining
- 10. O the location of the market in relation to the drilling site
- 11. Opollute

12. O provide examples of how oil exploration can endanger the environment

13.〇在 rock and sediment 后加 Unless something acts to halt his migration, these natural resources will eventually reach the surface.

14.0234

参考译文:

Petroleum Resources

石油,包括原油和天然气,似乎来自海洋沉积物的有机质中。微生物沉

降至海底并聚积在海泥中。有机质会使用溶解在沉积物中的氧气部分地进行分

解。当氧气用尽时,分解会停止,而剩余的有机质得以保留。

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连续的沉积——在海底的沉积过程——使有机质埋在较高的温度和压 力下,并转换成石油和天然气。当泥装沉积物被压在一起时,天然气和石油液滴 可能被挤出泥层,然后进入附近的沙层。经过很长一段时间(数百万年之久), 积聚的石油和天然气汇集在沙质层里。石油和天然气的密度都低于水,所以他们 通常上升到饱和水岩层和沉积物之上。

油池是宝贵的地下石油积聚物,油田是一个或多个油池下的区域。当一

个油池或油田被发现时,我们把井钻到地下。固定的塔,叫做井架,被建起来控制长距离的钻杆。现代便携式钻井机被安装,然后被拆除。当井到达油池时,石油通常会充满井,因为石油的密度与在它底下的水不同,或由于在石油上面的气体扩张的压力造成。尽管现在石油的自升已经被仔细的控制,石油的自喷或管涌,在过去是经常发生的。气体压力逐渐减小,然后油从井中被抽出。水或蒸汽会通过相邻的井被注入,以帮助驱动石油。在炼油厂,地下的原油被分离成天然气, 汽油,煤油和各种油类。石油化工产品,如染料,化肥,塑料制品也是由石油制造的。

随着油越来越难找到,石油勘探已经延伸到更恶劣的环境中。North

Slope of Alaska 油田的开发和 Alaska 管道的建设是新发现油藏中开支昂贵和开发 困难的例子。海上钻井平台将寻找石油的区域扩大到了海洋大陆架,那些大陆边 上较浅的海下滑坡区域。世界上四分之一以上的石油和近五分之一的天然气都来 自海洋,即使海上钻井比陆地钻井贵 6 至 7 倍。有相当一部分的石油和天然气 来自大不列颠和挪威之间的北海。

当然,地下还能发现更多的石油。它存在的油池可能太小或远离潜在的市场 而提高了钻井的经费。一些石油存在于禁止钻井的地区,如国家公园或其他公共 土地。即使提供最好的采油技术,油池中只有大约百分之三十到四十的石油可以 带到地面。其余实在难以提取,只能残留在地下。

此外,从地面和海上获得石油并卖给消费者会在运输途中造成环境问题。运输石油的管道在故障或塌方下会被破坏,造成了严重的石油泄漏。运载石油的船舶,又称油轮,在碰撞或意外搁浅(如一次性阿拉斯加 1989 年)的情况下可产生海上浮油。海上钻井平台也可能会泄露石油,造成浮油并漂流到岸上造



成海滩污染,损害环境。有时候,一个油田地面可能会在油被抽取之后下沉。Long Beach, California 附近的 Wilmington 油田,已经在 50 年内下沉了 9 米;不得 不建造保护围墙以防止海水流进这个地区。最后,石油炼制和石油燃烧,以及其 产品可造成空气污染。然而,先进的技术和严格的法律正在帮助控制这些不利的 环境影响。

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第二十三篇

OG 之中几个没有原文的题目

PASSAGE EXCERPT: "The United States in the 1800's was full of practical, hardworking people who did not consider the arts-from theater to painting-useful occupations. In addition,

the public's attitude that European art was better than American art both discouraged and infuriated American artists. In the early 1900's there was a strong feeling among artists that the United States was long overdue in developing art that did not reproduce European traditions. Everybody agreed that the heart and soul of the new country should be reflected in

its art. But opinions differed about what this art would be like and how it would develop." According to paragraph 1, all of the following were true of American art in the late 1800's and early 1900's EXCEPT:

O Most Americans thought art was unimportant.

OAmerican art generally copied European styles and traditions.

OMost Americans considered American art inferior to European art.

OAmerican art was very popular with European audiences.

PASSAGE EXCERPT: "... The nineteenth century brought with it a burst of new

discoveries and inventions that revolutionized the candle industry and made lighting available

to all. In the early-to-mid-nineteenth century, a process was developed to refine tallow (fat from animals) with alkali and sulfuric acid. The result was a product called stearin. Stearin is harder and burns ionger than unrefined tallow. This breakthrough meant that it was possible



to make tallow candles that would not produce the usual smoke and rancid odor. Stearins were also derived from palm oils, so vegetable waxes as well as animal fats could be used to make candles . . . "

Which of the following can be inferred from paragraph 1 about candles before the

nineteenth century?

 \bigcirc They did not smoke when they were burned.

OThey produced a pleasant odor as they burned.

OThey were not available to ail.

OThey contained sulfuric acid.

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PASSAQE EXCERPT: "In the animal world the task of moving about is fulfilled in many

ways. For some animals locomotion is accomplished by changes in body shape . . . "

The word locomotion in the passage is closest in meaning to

OEvolution

OMovement

○Survival

OEscape

PASSAGE E X C E R ~ "Some poisonous snake bites need to be treated immediately or the

victim will suffer paralysis

In stating that the victim will suffer paralysis the author means that the victim will

 \bigcirc lose the ability to move

 \bigcirc become unconscious

Oundergo shock

Ofeel great pain

PASSAGE EXCERPT: "... The first weekly newspaper in the colonies was the Boston

Gazette, established in 1719, the same year that marked the appearance of Philadelphia's first

newspaper, the American Mercury, where the young Benjamin Franklin worked. By 1760



Boston had 4 newspapers and 5 other printing establishments; Philadelphia, 2 newspapers and 3 other presses; and New York, 3 newspapers. The distribution, if not the sale, of newspapers was assisted by the establishment of a postal service in 1710, which had a network

of some 65 offices by 1770, serving all 13 colonies . . . "

The word which in the passage refers to

 \bigcirc Distribution

OSale

○ Newspaper

○ Postal service

PASSAGE EXCERPR "... Roots anchor the plant in one of two ways or sometimes by a

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combination of the two. The first is by occupying a large volume of shallow soil around the plant's base with a fibrous root system, one consisting of many thin, profusely branched roots.

Since these kinds of roots grow relatively close to the control soil erosion. Grass roots are

especially well suited to this purpose capture water as it begins to percolate into the ground

and so must draw their mineral supplies from the surface soil before the nutrients are leached

to lower levels . . . "

The phrase this purpose in the passage refers to

O combining two root systems

Ofeeding the plant

Opreventing soil erosion

Oleaching nutrients

PASSAGE EXCERPT WITH EXAMPLE SQUARES: "Scholars offer three related but

different opinions about this puzzle. One opinion is that the paintings were a record of the



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.

Look at the four squares
that indicate where the following sentence could be added to

the passage.

All three of them have strengths and weaknesses, but none adequately answers

all of the questions the paintings present.

Where would the sentence best fit?

To be Changed

1. According to paragraph 1, all of the following were true of American art in the late

1800's and early 1900's EXCEPT:

O Most Americans thought art was unimportant.

OAmerican art generally copied European styles and traditions.

O Most Americans considered American art inferior to European art.

OAmerican art was very popular with European audiences

2. Which of the following can be inferred from paragraph 1 about candles before the

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nineteenth century?

 $\bigcirc \mbox{They}$ did not smoke when they were burned.

OThey produced a pleasant odor as they burned.

OThey were not available to all.

OThey contained sulfuric acid.