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## 📌 细节题识别

### 疑问句

why did Kramer use...?  
when do caged starlings...?  
how did the birds fly...?  
which of the following is true of...?  
what is the difference between...and...?

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### 陈述句

...that Egyptian art lacks

## 📌 细节题方法

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## 📌 考试趋势

## 📌 例题热身 【难度★★☆☆☆】

### Orientation and Navigation

Paragraph 3: Early in his research, Kramer found that caged migratory birds became very restless at about the time they would normally have begun migration in the wild. Furthermore, he noticed that as they fluttered around in the cage, they often launched themselves in the direction of their normal migratory route. He then set up experiments with caged starlings and found that their orientation was, in fact, in the proper migratory direction except when the sky was overcast, at which times there was no clear direction to their restless movements. Kramer surmised, therefore, that they were orienting according to the position of the Sun. To test this idea, he blocked their view of the Sun and used mirrors to change its apparent position. He found that under these circumstances, the birds oriented with respect to the new "Sun." They seemed to be using the Sun as a compass to determine direction. At the time, this idea seemed preposterous. How could a bird navigate by the Sun when some of us lose our way with road maps? Obviously, more testing was in order.

6. According to paragraph 3, why did Kramer use mirrors to change the apparent position of the Sun?

- To test the effect of light on the birds' restlessness
- To test whether birds were using the Sun to navigate
- To simulate the shifting of light the birds would encounter along their regular migratory route
- To cause the birds to migrate at a different time than they would in the wild

7. According to paragraph 3, when do caged starlings become restless?

- When the weather is overcast
- When they are unable to identify their normal migratory route
- When their normal time for migration arrives
- When mirrors are used to change the apparent position of the Sun

Paragraph 5: In experimenting with artificial suns, Kramer made another interesting discovery. If the artificial Sun remained stationary, the birds would shift their direction with respect to it at a rate of about 15 degrees per hour, the Sun's rate of movement across the sky. Apparently, the birds were assuming that the "Sun" they saw was moving at that rate. When the real Sun was visible, however, the birds maintained a constant direction as it moved across the sky. In other words, they were able to compensate for the Sun's movement. This meant that some sort of biological clock was operating-and a very precise clock at that.

8. According to paragraph 5, how did the birds fly when the real Sun was visible?

- They kept the direction of their flight constant.
- They changed the direction of their flight at a rate of 15 degrees per hour.
- They kept flying toward the Sun.
- They flew in the same direction as the birds that were seeing the artificial Sun.

9. The experiment described in paragraph 5 caused Kramer to conclude that birds possess a biological clock because

- when birds navigate they are able to compensate for the changing position of the Sun in the sky
- birds' innate bearings keep them oriented in a direction that is within 15 degrees of the Sun's direction
- birds' migration is triggered by natural environmental cues, such as the position of the Sun
- birds shift their direction at a rate of 15 degrees per hour whether the Sun is visible or not

### Symbiotic Relationships

Paragraph 2: Parasitism is a kind of predator-prey relationship in which one organism, the parasite, derives its food at the expense of its symbiotic associate, the host. Parasites are usually smaller than their hosts. An example of a parasite is a tapeworm that lives inside the intestines of a larger animal and absorbs nutrients from its host. Natural selection favors the parasites that are best able to find and feed on hosts. At the same time, defensive abilities of hosts are also selected for. As an example, plants make chemicals toxic to fungal and bacterial parasites, along with ones toxic to predatory animals (sometimes they are the same chemicals). In vertebrates, the immune system provides a multiple defense against internal parasites.

21. According to paragraph 2, which of the following is true of the action of natural selection on hosts and parasites?

- Hosts benefit more from natural selection than parasites do.
- Both aggression in predators and defensive capacities in hosts are favored for species survival.
- The ability to make toxic chemicals enables a parasite to find and isolate its host.
- Larger size equips a parasite to prey on smaller host organisms.

真题-细节题实战

【难度★★★★☆☆】

## The origins of plant and animal domestication

The emergence of plant and animal domestication represented a monumental change in the ways that humans interacted with Earth's resources: the rate at which Earth's surface was modified and the rates of human population growth. The development of agriculture was accompanied by fundamental changes in the organization of human society: disparities in wealth, hierarchies of power, and urbanization.

Phrases like "plant and animal domestication" and "the invention of agriculture" create the impression that humans made the transition to cultivating plants and tending animals rather abruptly, maybe with a flash of insight. Most scholars don't think so. It seems more likely that humans used and manipulated wild plants and animals for many hundreds of thousands of years. The transition to gardens, fields, and pastures was probably gradual, the natural outgrowth of a long familiarity with the environmental requirements, growth cycles, and reproductive mechanisms of whatever plants and animals humans liked to eat, ride, or wear.

For years, scholars argued that the practices of cultivation and animal domestication were invented in one or two locations on Earth and then diffused from those centers of innovation. Genetic studies are now showing that many different groups of people in many different places around the globe learned independently to create especially useful plants and animals through selective breeding. Probably both independent invention and diffusion played a role in agricultural innovation. Sometimes the ideas of domestication and cultivation were relayed to new places. In other cases the farmers or herders themselves moved into new zones, taking agriculture or improvements such as new tools or new methods or new plants and animals with them.

Scholars used to assume that people turned to cultivating instead of gathering their food either because they had to in order to feed burgeoning populations, or because agriculture provided such obviously better nutrition. It now seems that neither of these explanations is valid. First of all, the risk attached to exploring new food sources when there were already too many mouths to feed would be too great. Second, agriculture did not necessarily improve nutrition or supplies of food. A varied diet based on gathered (and occasionally hunted) food probably provided a wider, more secure range of nutrients than an early agriculturally based diet of only one or two cultivated crops. More likely, populations expanded after agricultural successes, and not before.

Richard MacNeish, an archaeologist who studied plant domestication in Mexico and Central America, suggested that the chance to trade was at the heart of agricultural origins worldwide. Many of the known locations of agricultural innovation lie near early trade centers. People in such places would have had at least two reasons to pursue cultivation and animal raising; they would have had access to new information, plants, and animals brought in by traders, and they would have had a need for something to trade with the people passing through. Perhaps, then, agriculture was at first just a

profitable hobby for hunters and gatherers that eventually, because of market demand, grew into the primary source of sustenance. Trade in agricultural products may also have been a hobby that led to trouble.

E. N. Anderson, writing about the beginnings of agriculture in China, suggests that agricultural production for trade may have been the impetus for several global situations now regarded as problems: rapid population growth, social inequalities, environmental degradation, and famine. Briefly explained, his theory suggests that groups turned to raising animals and plants in order to reap the profits of trading them. As more labor was needed to supply the trade, humans produced more children. As populations expanded, more resources were put into producing food for subsistence and for trade. Gradually, hunting and gathering technology was abandoned as populations, with their demands for space, destroyed natural habitats. Meanwhile, a minority elite emerged when the wealth provided by trade did not accrue equally to everyone. Yet another problem was that a drought or other natural disaster could wipe out an entire harvest, thus, as ever larger populations depended solely on agriculture, famine became more common.

### Paragraph 1

The emergence of plant and animal domestication represented a monumental change in the ways that humans interacted with Earth's resources: the rate at which Earth's surface was modified and the rates of human population growth. The development of agriculture was accompanied by fundamental changes in the organization of human society: disparities in wealth, hierarchies of power, and urbanization.

1. The word “monumental” in the passage is closest in meaning to

- A innovative
- B surprising
- C complex
- D enormous

### Paragraph 2

Phrases like “plant and animal domestication” and “the invention of agriculture” create the impression that humans made the transition to cultivating plants and tending animals rather abruptly, maybe with a flash of insight. Most scholars don't think so. It seems more likely that humans used and manipulated wild plants and animals for many hundreds of thousands of years. The transition to gardens, fields, and pastures was probably gradual, the natural outgrowth of a long familiarity with the environmental requirements, growth cycles, and reproductive mechanisms of whatever plants and animals humans liked to eat, ride, or wear.

2. According to paragraph 2, phrases such as “plant and animal domestication” and “the invention of agriculture” encourage which of the following wrong ideas?

- A Early farmers were fairly advanced in their knowledge of plants and animals.
- B Agriculture and animal domestication arose as a result of systematic study and experimentation.
- C The change from hunting and gathering to farming and raising animals occurred quickly.
- D Early efforts to raise plants and animals were generally successful.

3. The word “manipulated” in the passage is closest in meaning to

- A observed
- B consumed
- C skillfully used
- D protected

The transition to gardens, fields, and pastures was probably gradual, the natural outgrowth of a long familiarity with the environmental requirements, growth cycles, and reproductive mechanisms of whatever plants and animals humans liked to eat, ride, or wear.

4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
- A The change to land cultivation was a slow process because humans were familiar with the needs of relatively few plants and animals.
  - B The cultivation of land occurred gradually as it was the product of extensive human experience observing plants and animals of value to humans.
  - C Gardens, fields, and pastures were outgrowths of the desire for plants and animals that humans knew from long familiarity were good to eat, wear, or ride.
  - D People learned about environmental requirements, growth cycles, and reproductive mechanisms through their long familiarity with plants and animals that they liked to eat, ride, and wear.

### Paragraph 3

For years, scholars argued that the practices of cultivation and animal domestication were invented in one or two locations on Earth and then diffused from those centers of innovation. Genetic studies are now showing that many different groups of people in many different places around the globe learned independently to create especially useful plants and animals through selective breeding. Probably both independent invention and diffusion played a role in agricultural innovation. Sometimes the ideas of domestication and cultivation were relayed to new places. In other cases the farmers or herders themselves moved into new zones, taking agriculture or improvements such as new tools or new methods or new plants and **animals** with them.

5. What do genetic studies suggest about the theory that “cultivation and animal domestication were invented in one or two locations on Earth and then diffused from those centers of innovation”?
- A The theory underestimates the speed at which cultivation and animal domestication were diffused.
  - B The theory underestimates the number of locations in which cultivation and animal domestication arose independently.
  - C The theory overemphasizes the importance of selective breeding in cultivation and animal domestication.
  - D The theory overemphasizes the importance of cultivation and animal domestication to some groups of people.

### Paragraph 4



Scholars used to assume that people turned to cultivating instead of gathering their food either because they had to in order to feed burgeoning populations, or because agriculture provided such obviously better nutrition. It now seems that neither of these explanations is valid. First of all, the risk attached to exploring new food sources when there were already too many mouths to feed would be too great. Second, agriculture did not necessarily improve nutrition or supplies of food. A varied diet based on gathered (and occasionally hunted) food probably provided a wider, more secure range of nutrients than an early agriculturally based diet of only one or two cultivated crops. More likely, populations expanded after agricultural successes, and not before.

6. According to paragraph 4, what advantages did the diet of hunter-gatherers probably have over an early agricultural diet?

- A It required less effort for them to acquire food that was nutritious.
- B It allowed their populations to expand across wider areas.
- C It provided a greater variety of foods needed for them to stay healthy.
- D It allowed them to have more children.

7. According to paragraph 4, what was the most likely relationship between population growth and food cultivation?

- A Population growth encouraged the development of food cultivation.
- B Population growth was dependent on the development of a varied diet of cultivated foods.
- C Successful methods of food cultivation were developed before population growth occurred.
- D Food cultivation was more successful in situations where population growth was limited.

### Paragraph 5

Richard MacNeish, an archaeologist who studied plant domestication in Mexico and Central America, suggested that the chance to trade was at the heart of agricultural origins worldwide. Many of the known locations of agricultural innovation lie near early trade centers. People in such places would have had at least two reasons to pursue cultivation and animal raising; they would have had access to new information, plants, and animals brought in by traders, and they would have had a need for something to trade with the people passing through. Perhaps, then, agriculture was at first just a profitable hobby for hunters and gatherers that eventually, because of market demand, grew into the primary source of sustenance. Trade in agricultural products may also have been a hobby that led to trouble.

8. The word “pursue” in the passage is closest in meaning to

- A practice
- B encourage
- C prefer
- D combine

9. Which of the following most accurately reflects the statement discussed in paragraph 5, on efforts to cultivate plants and animals?

- A The efforts often failed because hunter-gatherers had limited access to new information about plants and animals.
- B The efforts were begun out of a desire to produce goods for trade rather than to increase their growers' food supplies.
- C The efforts were sometimes abandoned so hunter-gatherers could become involved in the more profitable activity of trading.
- D The efforts were not profitable until people began trading food that they had raised for other goods.

### Paragraph 5

Richard MacNeish, an archaeologist who studied plant domestication in Mexico and Central America, suggested that the chance to trade was at the heart of agricultural origins worldwide. Many of the known locations of agricultural innovation lie near early trade centers. People in such places would have had at least two reasons to pursue cultivation and animal raising; they would have had access to new information, plants, and animals brought in by traders, and they would have had a need for something to trade with the people passing through. Perhaps, then, agriculture was at first just a profitable hobby for hunters and gatherers that eventually, because of market demand, grew into the primary source of sustenance. Trade in agricultural products may also have been a hobby that led to trouble.

### Paragraph 6

E. N. Anderson, writing about the beginnings of agriculture in China, suggests that agricultural production for trade may have been the impetus for several global situations now regarded as problems: rapid population growth, social inequalities, environmental degradation, and famine. Briefly explained, his theory suggests that groups turned to raising animals and plants in order to reap the profits of trading them. As more labor was needed to supply the trade, humans produced more children. As populations expanded, more resources were put into producing food for subsistence and for trade. Gradually, hunting and gathering technology was abandoned as populations, with their demands for space, destroyed natural habitats. Meanwhile, a minority elite emerged when the wealth provided by trade did not accrue equally to everyone. Yet another problem was that a drought or other natural disaster could wipe out an entire harvest, thus, as ever larger populations depended solely on agriculture, famine became more common.

10. Which of the following most accurately reflect the relationship between paragraph 6 and a topic discussed in paragraph 5?
- A Paragraph 6 discusses a series of events that calls into question the theory that plants and animals were raised for purposes of trade.
  - B Paragraph 6 presents evidence supporting the claim that many sites of agricultural innovation were located near trade centers.
  - C Paragraph 6 identifies problems that led to the raising of plants and animals as the primary source of sustenance.
  - D Paragraph 6 traces negative developments that arose possibly as a result of raising plants and animals for trade.
11. The word "subsistence" in the passage is closest in meaning to
- A profit
  - B surplus



- C enjoyment
- D survival

### Paragraph 3

For years, scholars argued that the practices of cultivation and animal domestication were invented in one or two locations on Earth and then diffused from those centers of innovation. ■Genetic studies are now showing that many different groups of people in many different places around the globe learned independently to create especially useful plants and animals through selective breeding. ■Probably both independent invention and diffusion played a role in agricultural innovation. ■Sometimes the ideas of domestication and cultivation were relayed to new places. In other cases the farmers or herders themselves moved into new zones, taking agriculture or improvements such as new tools or new methods or new plants and animals with them. ■

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

**Among the many places that are now known to be centers of independent domestication are Mesopotamia, Central China, and Mesoamerica.**

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 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 transition from hunting and gathering to raising plants and animals was gradual and led to significant changes in the organization of human societies.

Scholars now believe that agriculture and animal domestication began independently in many separate locations and then spread to new areas.

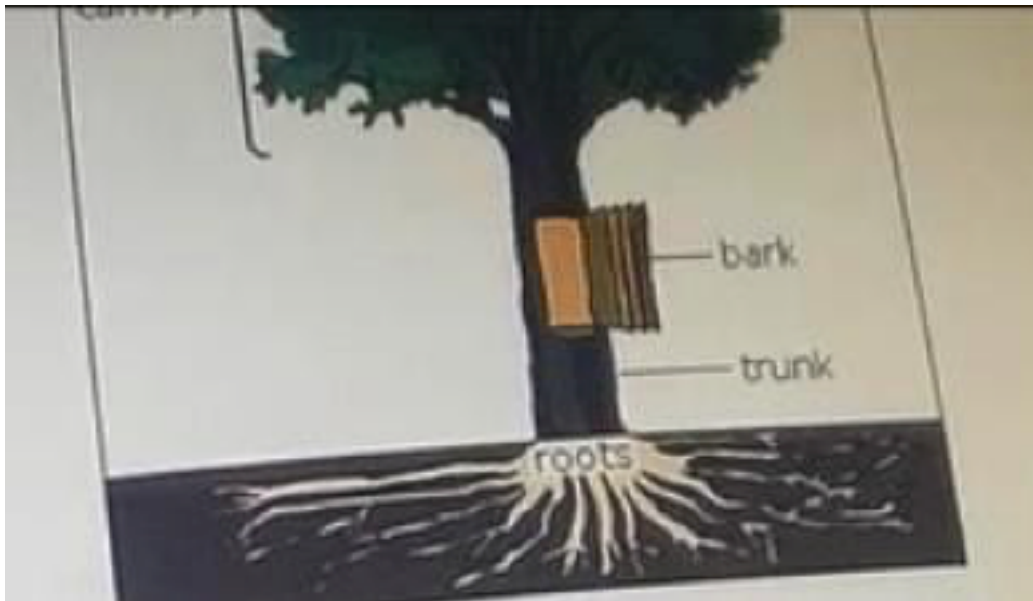
As trade in agricultural products grew and social inequalities arose, new crops were developed specifically to feed the labor needed to support societies.

Although it is now clear that agriculture developed independently in many places, often the most efficient techniques arose by combining practices of different cultures.

Agriculture became more widespread when human populations realized that an agricultural diet supplemented through trade could provide as much nutrition as the hunter-gatherer diet.

The earliest reason for raising plants and animals may have been to provide goods for trade, and such trade may account for the rise in social problems such as environmental destruction.

## Preventing overgrowth among tree branches



One way trees prevent themselves from having too many branches is simply by shedding (dropping off) branches once they have fulfilled their purpose. This happens as the tree gets bigger and grows new outer layers of foliage that shade the inner and lower branches. In most large trees, the center of the canopy contains only large branches, small branches and fine twigs are found only at the canopy's edge. In the shaded center, the small branches that would once have occupied that space are long gone. Trees like the true cypresses regularly shed small twigs complete with leaves toward the end of summer. Most other trees shed only branches that prove unproductive. If a branch is not producing enough carbohydrate to cover its own running costs—i.e., it needs to be subsidized by other branches because, for example, it is being shaded and receives little light—it will usually be got rid of. This prevents unproductive branches from being a drain on the tree and removes the wind drag (the force of air resistance) from useless branches.

Branches are shed for reasons other than lack of light. In dry parts of the world, it is common for trees and shrubs to lose smaller branches to save water. Small branches have the thinnest bark (the protective outer covering of a tree) and greatest surface area and thus are the source of most water loss once the leaves have been lost. The creosote bush of United States deserts self-prunes, or removes parts of itself, in the face of extreme heat or drought, starting from the highest and most exposed twigs and working downward to bigger and bigger branches, it's a desperate act because if the creosote bush loses too much food, it dies. Shedding branches can also be useful for self-propagation. Most poplar trees and willow trees characteristic of waterways will readily drop branches, which take root when washed up on muddy banks further downstream.

How are branches shed? In the simplest cases, dead branches rot and fall off, or healthy branches are snapped off by wind, snow, and animals. Some willows have a brittle zone at the base of small branches that encourages breaking in the wind, seemingly for propagation. Other cases of "natural pruning" are more startling: elm trees, and to a certain extent others, such as oaks, have a reputation for dropping large branches (up to half a meter in diameter) with no warning on calm, hot afternoons. Such dramatic

shedding appears to be due to a combination of internal water stress coupled with heat expansion affecting cracks and decayed wood.

Many trees, however, shed branches deliberately. In this situation, branches are shed in the same way as foliage in autumn by the prior formation of a corky layer that leaves the wound sealed over with cork, which in turn is undergrown with wood the following year. In hardwoods, branches up to a meter in length and several centimeters in diameter can be shed normally after the leaves have fallen in the autumn (maples are unusual in casting branches mainly in spring and early summer). Oaks tend to shed small twigs up to the thickness of a pencil, beech may shed larger ones, and birches dump whole branches of dead twigs. Pine trees shed their clusters of needles (which really are short branches), and members of the redwood family shed their small branchlets with leaves. Typically in hardwood trees, something around 10 percent of terminal branches are lost each year through a mixture of deliberate shedding and being broken off.

Another way of reducing potential congestion is to make some branches smaller than others. Branches in the shade grow smaller than those in the sun. But trees can also regulate branch length from within. In many trees there is a clear distinction between long and short branches or shoots. The long shoots build the framework of the tree, making it bigger. The job of the short shoots (called spur shoots by horticulturalists) is to produce leaves, and commonly flowers, at more or less the same position every year. To maintain flexibility, any one shoot can switch from long to short or vice versa depending on internal factors, light levels, and damage.

### Paragraph 1

One way trees prevent themselves from having too many branches is simply by shedding (dropping off) branches once they have fulfilled their purpose. This happens as the tree gets bigger and grows new outer layers of foliage that shade the inner and lower branches. In most large trees, the center of the canopy contains only large branches, small branches and fine twigs are found only at the canopy's edge. In the shaded center, the small branches that would once have occupied that space are long gone. Trees like the true cypresses regularly shed small twigs complete with leaves toward the end of summer. Most other trees shed only branches that prove unproductive. If a branch is not producing enough carbohydrate to cover its own running costs—i.e., it needs to be subsidized by other branches because, for example, it is being shaded and receives little light—it will usually be got rid of. This prevents unproductive branches from being a drain on the tree and removes the wind drag (the force of air resistance) from useless branches.

1. All of the following situations are mentioned in paragraph 1 for a tree to shed its branches EXCEPT
  - A endangering other branches
  - B building up on a tree
  - C wasting a tree's resources
  - D growing larger
2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- A A tree will usually shed branches that use more carbohydrate than they produce.
- B Branches that are shaded usually do not receive enough light to produce all the carbohydrate they need.
- C If a tree gets rid of a branch, it is usually because other branches lack enough carbohydrate to subsidize it.
- D If a branch is shaded and cannot produce as much carbohydrate as it needs, it will usually be subsidized by other branches.

3. According to paragraph 1 most twigs of the true cypresses would be arranged in which of the following manner

- A Most small twigs on true cypresses have been found located at the margins of the canopy.
- B The shaded center areas of true cypresses are generally occupied by many small twigs and branches.
- C True cypresses shed twigs that grow on large, unproductive branches.
- D True cypresses seasonally shed small twigs without regard to whether they are productive or not.

## Paragraph 2

Branches are shed for reasons other than lack of light. In dry parts of the world, it is common for trees and shrubs to lose smaller branches to save water. Small branches have the thinnest bark (the protective outer covering of a tree) and greatest surface area and thus are the source of most water loss once the leaves have been lost. The creosote bush of United States deserts self-prunes, or removes parts of itself, in the face of extreme heat or drought, starting from the highest and most exposed twigs and working downward to bigger and bigger branches; it's a desperate act because if the creosote bush loses too much wood, it dies. Shedding branches can also be useful for self-propagation. Most poplar trees and willow trees characteristic of waterways will readily drop branches, which take root when washed up on muddy banks further downstream.

- 4. Which of the following best describes the role of the explanation offered in paragraph 2?
  - A Paragraph 2 questions this explanation by providing counterexamples of some trees.
  - B Paragraph 2 presents additional evidence supporting this explanation.
  - C Paragraph 2 discusses some additional reasons why trees shed branches
  - D Paragraph 2 points out some additional consequences for trees besides the shedding of branches
- 5. The word "exposed" in the passage is closet in meaning to
  - A distant
  - B unprotected
  - C easily replaced
  - D unproductive

6. According to paragraph 2, what is true of the creosote bush of United States deserts?

- A It tends to grow small branches during dry parts of the year.
- B It loses more water through its bark than through its leaves.
- C It loses its lower branches only after losing upper ones.

- D It sheds branches for the purpose of propagating itself.

### Paragraph 3

How are branches shed? In the simplest cases, dead branches rot and fall off, or healthy branches are snapped off by wind, snow, and animals. Some willows have a brittle zone at the base of small branches that encourages breaking in the wind, seemingly for propagation. Other cases of “natural pruning” are more startling: elm trees, and to a certain extent others, such as oaks, have a reputation for dropping large branches (up to half a meter in diameter) with no warning on calm, hot afternoons. Such dramatic shedding appears to be due to a combination of internal water stress coupled with heat expansion affecting cracks and decayed wood.

7. The phrase “with no warning” in the passage is closest in meaning to
- A without any benefit
  - B without any stress
  - C without any indication beforehand
  - D without any damage
8. All of the following are mentioned in paragraph 3 as a way in which branches can be lost EXCEPT:
- A being broken off by the wind
  - B being shed for propagation
  - C becoming rotten
  - D becoming too large in diameter
9. Which of the following is mentioned in paragraph 3 in the shedding of large branches by oaks on calm, hot afternoons?
- A The development of a brittle zone at the base of the branches
  - B The enlargement of cracks in the branches due to heat
  - C The rise of sudden bursts of wind that snap off decayed wood
  - D The seasonal need to propagate new trees

### Paragraph 4

Many trees, however, shed branches deliberately. In this situation, branches are shed in the same way as foliage in autumn by the prior formation of a corky layer that leaves the wound sealed over with cork, which in turn is undergrown with wood the following year. In hardwoods, branches up to a meter in length and several centimeters in diameter can be shed normally after the leaves have fallen in the autumn (maples are unusual in casting branches mainly in spring and early summer). Oaks tend to shed small twigs up to the thickness of a pencil, beech may shed larger ones, and birches dump whole branches of dead twigs. Pine trees shed their clusters of needles (which really are short branches), and members of the redwood family shed their small branchlets with leaves. Typically in hardwood trees, something around 10 percent of terminal branches are lost each year through a mixture of deliberate shedding and being broken off.



10. According to paragraph 4, what information can be learned from the deliberate shedding of branches by the trees?
- A Limiting the size of branches being shed to comparatively small ones
  - B Forming a new layer of wood to seal the wounded area immediately after shedding
  - C Shedding leaves at the same time that branches are being shed
  - D Forming a layer of protective tissue before branch shedding begins

### Paragraph 5

Another way of reducing potential congestion is to make some branches smaller than others. Branches in the shade grow smaller than those in the sun. But trees can also regulate branch length from within. In many trees there is a clear distinction between long and short branches or shoots. The long shoots build the framework of the tree, making it bigger. The job of the short shoots (called spur shoots by horticulturalists) is to produce leaves, and commonly flowers, at more or less the same position every year. To maintain flexibility, any one shoot can switch from long to short or vice versa depending on internal factors, light levels, and damage.

11. The word “congestion” in the passage is closest in meaning to
- A loss
  - B damage
  - C overcrowding
  - D stress

12. According to paragraph 5, what is the main purpose of the long branches or shoots?

- A To regulate the length of large branches
- B To increase the size of the tree
- C To produce leaves and flowers
- D To help create shaded areas

### Paragraphs 1-2

One way trees prevent themselves from having too many branches is simply by shedding (dropping off) branches once they have fulfilled their purpose. This happens as the tree gets bigger and grows new outer layers of foliage that shade the inner and lower branches. In most large trees, the center of the canopy contains only large branches, small branches and fine twigs are found only at the canopy's edge. In the shaded center, the small branches that would once have occupied that space are long gone. Trees like the true cypresses regularly shed small twigs complete with leaves toward the end of summer. Most other trees shed only branches that prove unproductive. If a branch is not producing enough carbohydrate to cover its own running costs—i.e., it needs to be subsidized by other branches because, for example, it is being shaded and receives little light—it will usually be got rid of. This prevents unproductive branches from being a drain on the tree and removes the wind drag (the force of air resistance) from useless branches.



■ Branches are shed for reasons other than lack of light. ■ In dry parts of the world, it is common for trees and shrubs to lose smaller branches to save water. ■ Small branches have the thinnest bark (the protective outer covering of a tree) and greatest surface area and thus are the source of most water loss once the leaves have been lost. ■ The creosote bush of United States deserts self-prunes, or removes parts of itself, in the face of extreme heat or drought, starting from the highest and most exposed twigs and working downward to bigger and bigger branches, it's a desperate act because if the creosote bush loses too much food, it dies. Shedding branches can also be useful for self-propagation. Most poplar trees and willow trees characteristic of waterways will readily drop branches, which take root when washed up on muddy banks further downstream.

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

**A tree will also shed branches if its water supply is insufficient.**

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 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.**

Trees can benefit from shedding inefficient branches that consume more carbohydrates than they produce or that are a major source of water loss.

Branches can be lost as a result of damage from weather, animals, or disease, but they can also be shed when they are no longer useful, much as leaves are shed in autumn.

While branch shedding is common and may be necessary for a tree's survival, the corky layer that forms at sites where branches have been shed prevents additional growth in those areas for several years.

Shedding large branches is such a desperate act for survival that the creosote bush is one of the few plants to use this mechanism for removing wood.

Larger trees can self-propagate when water stress and heat expansion break off branches, as long as the shed branches fall on or can be transported to a location favorable for taking root.

Trees prevent branch overcrowding in part by varying branch length through internal mechanisms such as having shoots that can switch from long to short or from short to long, as needed.

## Effects of Commercial Revolution

In the third and the second millennia B.C. long-distance trade supposedly had the character of an expedition. By the start of the last millennium B.C., however, a new approach to engaging in such trade emerged. Based on the principle of colonization, it was pioneered by the Phoenicians and Greeks, who established colonies along the Mediterranean Sea. The new approach to long-distance trade, known as the commercial revolution, led to changes in a number of political and economic patterns.

For the first time, the planting of colonies in distant lands became possible. The Phoenician settlements in the central and western Mediterranean, such as Carthage, and the slightly later establishment of Greek colonies are early examples, while the settlement of south Arabians in Eritrea around the middle of the last millennium marks the subsequent spread of this sort of commercial consequence to the Horn of Africa. In the third or second millennia B. C., a state such as Egypt might colonize areas outside its heartland, such as Nubia. But this colonization comprised military outposts and ethnic settlements that were planted to hold the contiguous territories of a land empire, not distant localities far separated from the home country.

The commercial revolution constructed the economic basis as well for a new kind of town or city, an urban center that above all serviced trade and was home to the crafts and occupational specializations that went along with commercial development. The urban locations of earlier times commonly drew trade simply because their populations had included a privileged elite of potential consumers. Such towns had arisen in the first place as political and religious centers of the society, they attracted population because power and influence resides there and access to position and wealth could be gained through service to the royal or priestly leadership.

Wherever the effects of the commercial revolution penetrated over the last millennium B. C., kings and emperors increasingly lost their ability to treat trade as a royalty sponsored activity, intended to preserve the commodities of trade as the privileges of immemorial power and position. Instead, their policies shifted toward controlling geographical accessibility to the products of commerce and to ensuring security and other conditions that attracted and enhanced the movement of goods. No longer could kings rely on agriculturally supported and religiously based claims to an ability to protect their lands and people; now they also had to overtly support the material prosperity of their people compared to other societies. And rather than exerting a monopoly over prestige commodities, as had Egyptian kings of the third and second millennia, and redistributing such commodities in ways designed to reinforce the allegiance of their subjects and enhance the awesomeness of their position, rulers turned to the taxation of trade and to the creation and control of currency, more and more relying on duties and other revenues to support the apparatus of the state. It was no historical accident that the first metal coinage in the world began to be made in eighth-century Anatolia (modern Turkey) and that the use of coins rapidly spread with the expanding commercial revolution. The material bases and the legitimizations of state authority as we know them today had begun to take shape.

The commercial revolution tended also to spread a particular pattern of exchange. The early commercial centers of the Mediterranean most characteristically offered manufactured goods—purple dye, metal goods, wine, olive oil, and so forth—for the raw materials or the partially processed natural products of other regions. As the commercial revolution spread, this kind of exchange tended to spread with it, with the recently added areas of commerce providing new kinds of raw materials or new sources for familiar products of the natural world, and the longer established commercial centers—which might themselves have lain at the margins of this transformation—producing, or acting as the intermediaries—producing, or acting as the intermediaries in the transmission of, manufactured commodities. India, for instance, had developed by the turn of the era into a major exporter of its own cotton textiles, as well as naturally occurring materials, such as gems of various kinds, and at the same time its merchants were the intermediaries of the silk trade.

### Paragraph 1

In the third and the second millennia B.C. long-distance trade supposedly had the character of an expedition. By the start of the last millennium B.C., however, a new approach to engaging in such trade emerged. Based on the principle of colonization, it was **pioneered** by the Phoenicians and Greeks, who established colonies along the Mediterranean Sea. The new approach to long-distance trade, known as the commercial revolution, led to changes in a number of political and economic patterns.

1. The word “pioneered” in the passage is closest in meaning to
  - A adopted
  - B described
  - C demonstrated
  - D introduced

### Paragraph 2

For the first time, the planting of colonies in distant lands became possible. The Phoenician settlements in the central and western Mediterranean, such as Carthage, and the slightly later establishment of Greek colonies are early examples, while the settlement of south Arabians in Eritrea around the middle of the last millennium marks the **subsequent** spread of this sort of commercial consequence to the Horn of Africa. In the third or second millennia B. C., a state such as Egypt might colonize areas outside its heartland, such as Nubia. But this colonization **comprised** military outposts and ethnic settlements that were planted to hold the contiguous territories of a land empire, not distant localities far separated from the home country.

2. All of the following groups are mentioned in paragraph 2 as establishing distant trading outposts in the last millennium B. C. EXCEPT
  - A the Greeks
  - B the Egyptians
  - C the Phoenicians
  - D the south Arabians

3. The word “subsequent” in the passage is closet in meaning to
- A initial
  - B anticipated
  - C later
  - D increasing
4. In paragraph 2, why does the author mention the colonization of Nubia by the Egyptians?
- A To prove that colonization was first carried out by the military
  - B To indicate that Egypt was a major military power in the third and second millennia B. C.
  - C To illustrate how large the geographic area of colonization had become over several millennia
  - D To show that the purpose of colonization during the third and second millennia B. C. differed from that of the last millennium B. C.
5. The word “comprised” in the passage is closet in meaning to
- A resulted in
  - B focused on
  - C was inspired by
  - D consisted of

### Paragraph 3

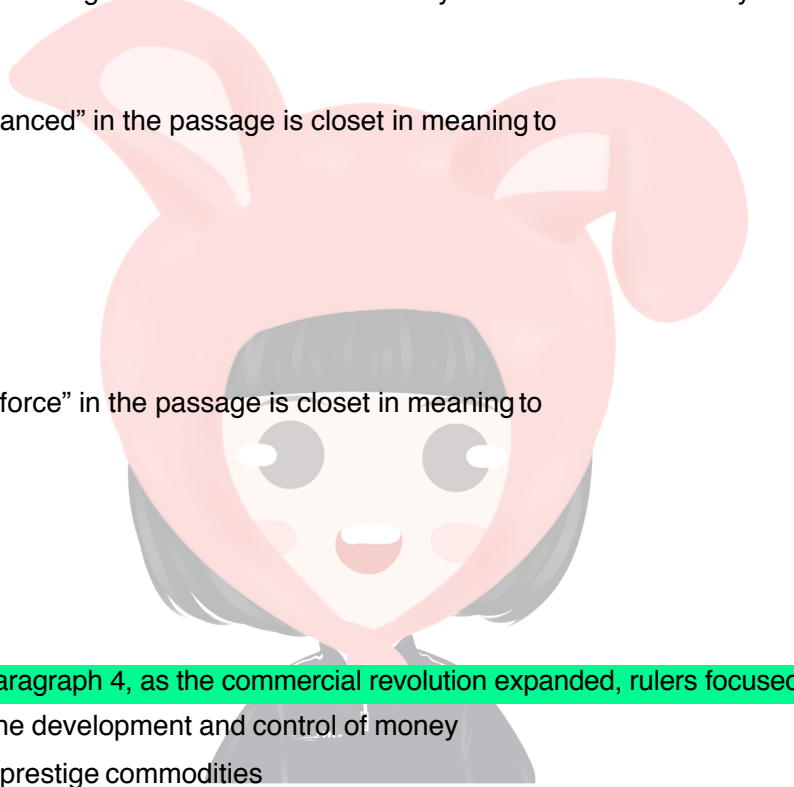
The commercial revolution constructed the economic basis as well for a new kind of town or city, an urban center that above all serviced trade and was home to the crafts and occupational specializations that went along with commercial development. The urban locations of earlier times commonly drew trade simply because their populations had included a privileged elite of potential consumers. Such towns had arisen in the first place as political and religious centers of the society, they attracted population because power and influence resides there and access to position and wealth could be gained through service to the royal or priestly leadership.

6. According to paragraph 3, before the emergence of the commercial revolution, trade
- A enabled craftspeople and occupational specialists to gain power and influence in society
  - B centered on the ruling elite and those groups closely associated with them
  - C was primarily conducted by people serving the royal and religious leadership
  - D was a major reason why urban centers were established

### Paragraph 4

Wherever the effects of the commercial revolution penetrated over the last millennium B. C., kings and emperors increasingly lost their ability to treat trade as a royalty sponsored activity, intended to preserve the commodities of trade as the privileges of immemorial power and position. Instead, their policies shifted toward controlling geographical accessibility to the products of commerce and to ensuring security and other conditions that attracted and enhanced the movement of goods. No longer could kings

rely on agriculturally supported and religiously based claims to an ability to protect their lands and people; now they also had to overtly support the material prosperity of their people compared to other societies. And rather than exerting a monopoly over prestige commodities, as had Egyptian kings of the third and second millennia, and redistributing such commodities in ways designed to reinforce the allegiance of their subjects and enhance the awesomeness of their position, rulers turned to the taxation of trade and to the creation and control of currency, more and more relying on duties and other revenues to support the apparatus of the state. It was no historical accident that the first metal coinage in the world began to be made in eighth-century Anatolia (modern Turkey) and that the use of coins rapidly spread with the expanding commercial revolution. The material bases and the legitimizations of state authority as we know them today had begun to take shape.

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7. The word “enhanced” in the passage is closest in meaning to
- A improved
  - B influenced
  - C protected
  - D necessitated
8. The word “reinforce” in the passage is closest in meaning to
- A demand
  - B strengthen
  - C earn
  - D repay
9. According to paragraph 4, as the commercial revolution expanded, rulers focused on
- A taxation and the development and control of money
  - B monopolizing prestige commodities
  - C distributing prestige commodities to ensure the allegiance of their subjects
  - D protecting their land to legitimize their authority
10. What can be inferred from paragraph 4 about Anatolia?
- A Its merchants specialized in the trading of prestige commodities.
  - B It was the first place to use currency for the taxation of trade.
  - C It contained enormous supplies of metal compared with other states in the region.
  - D Trade remained a royally sponsored activity there long after the emergence of the commercial revolution.

### Paragraph 5

The commercial revolution tended also to spread a particular pattern of exchange. The early commercial centers of the Mediterranean most characteristically offered manufactured goods—purple dye, metal goods, wine, olive oil, and so forth—for the raw materials or the partially processed natural products of other regions. As the commercial revolution spread, this kind of exchange tended to spread with it, with the recently added areas of commerce providing new kinds of raw materials or new sources for familiar



products of the natural world, and the longer established commercial centers—which might themselves have lain at the margins of this transformation—producing, or acting as the intermediaries in the transmission of, manufactured commodities. India, for instance, had developed by the turn of the era into a major exporter of its own cotton textiles, as well as naturally occurring materials, such as gems of various kinds, and at the same time its merchants were the intermediaries of the silk trade.

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

- A During the commercial revolution, newer centers of trade acted as intermediaries in the exchange of different types of manufactured goods.
- B Longer-established trading centers were familiar with the unprocessed products of the natural world, but depended on other areas as sources for manufactured commodities.
- C Eventually, the commercial revolution led to a trading system whereby newly established commercial centers provided the resources needed for the production of goods while older trading centers produced the goods or assisted in their distribution.
- D The commercial revolution depended on a system of trade where consumers valued novelty in the manufactured goods they acquired, but, at the same time, they wanted to be familiar with the natural products they received.

12. Paragraph 5 supports which of the following statements about Indian merchants at the time of the commercial revolution?

- A They imported cotton, silk, and other high-quality fabrics intended for the Indian market.
- B They obtained various kinds of gems from intermediaries in the silk trade.
- C They were simultaneously exporters of manufactured and natural products and intermediaries for goods produced elsewhere.
- D They created a highly sophisticated textile industry at the same time that they were engaged in the processing of natural products.

### Paragraph 3

■The commercial revolution constructed the economic basis as well for a new kind of town or city, an urban center that above all serviced trade and was home to the crafts and occupational specializations that went along with commercial development. ■The urban locations of earlier times commonly drew trade simply because their populations had included a privileged elite of potential consumers. ■Such towns had arisen in the first place as political and religious centers of the society, they attracted population because power and influence resides there and access to position and wealth could be gained through service to the royal or priestly leadership. ■

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

**It was significantly different from the typical centers that existed before the commercial revolution.**



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.**

New kinds of urban centers emerged that focused on commerce and encouraged craft and occupational specializations.

Rulers in the last millennium began to promote the material prosperity of their people through support and improvement of commerce.

More established commercial centers supplied final products to newer regions in exchange for raw materials.

During the first millennium B. C., new political and religious centers arose that based their power on their ability to protect their lands and people.

The focus on raw materials switched the balance of power from the manufacturing centers to the control of the exporters of the natural products.

Military occupation of neighboring lands became a major means of expanding trade into new territories.

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📌 高 难 细节题

Bird Colonies 【难度★★★★☆】

Paragraph 1

About 13 percent of bird species, including most seabirds, nest in colonies. Colonial nesting evolves in response to a combination of two environmental conditions: (1) a shortage of nesting sites that are safe from predators and (2) abundant or unpredictable food that is distant from safe nest sites. Colonial nesting has both advantages and disadvantages. First and foremost, individual birds are safer in colonies that are inaccessible to predators, as on small rocky islands. In addition, colonial birds detect predators more quickly than do small groups or pairs and can drive the predators from the vicinity of the nesting area. Because nests at the edges of breeding colonies are more vulnerable to predators than those in the centers, the preference for advantageous central sites promotes dense centralized packing of nests.

6. According to paragraph 3, what advantage do birds gain by hatching all the colony's eggs at the same time?
- A. They are able to time the hatching of their chicks for when predators are not likely to be around.
  - B. Chicks hatch when food is abundant, which is generally only a few times a year.
  - C. Even if predators eliminate some of the newly hatched birds, many others will survive.
  - D. Weaker birds gain protection for their young by synchronizing their nesting behavior with that of the more dominant birds of the colony.

总结



👏 预告

3月27日中午12点, 洋葱精听大法 【录播】

3月28日晚上19点, kw立体分层笔记大法 【直播】

## 答案

### 1 The origins of plant and animal domestication

DCCBB CCABD DB

1 [The transition from]

2 [Scholars now believe]

6 [The earliest reason for]

### 2 Preventing overgrowth among tree branches

BADCB CCDBD CBB

1 [Trees can benefit ]

2 [Branches can be lost]

6 [Trees prevent brach overcrowding]

### 3 Effects of Commercial Revolution

DBCDD BABAB CCB

1 [ New kinds of]

2 [Rulers in the last]

3 [More established commercial]

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