

41. Directions: Look at the part of the passage that is displayed above. The letters **(A)**, **(B)**, **(C)**, and **(D)** indicate where the following sentence could be added.

So since the chances of survival for any individual spore are small, the plants have to produce many spores in order to propagate.

Where would the sentence best fit?

- (A)** Choice A
- (B)** Choice B
- (C)** Choice C
- (D)** Choice D

42. 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.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

After the formation of the Hawaiian Islands, much time passed before conditions were suitable for plant life.

Answer Choices

- A Algae are classified as symbiotic because they produce energy through the process of photosynthesis.
- B The first successful plants on Hawaii were probably lichens, which consist of algae and fungi living in a symbiotic relationship.
- C Lichens helped create favorable conditions for the growth of spore-producing plants such as ferns and mosses.
- D Seed-bearing plants evolved much later than spore-producing plants, but both types of plants had evolved well before the formation of the Hawaiian Islands.
- E Unlike spores, seeds must move to new habitats in order to have a strong chance of survival and growth.
- F Seed-bearing plants arrived and spread quickly in Hawaii, thanks to characteristics that increased their seeds' ability to survive and to move to different areas.

Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

CHINESE POTTERY

China has one of the world's oldest continuous civilizations—despite invasions and occasional foreign rule. A country as vast as China with so long-lasting a civilization has a complex social and visual history, within which pottery and porcelain play a major role.

The function and status of ceramics in China varied from dynasty to dynasty, so they may be utilitarian, burial, trade, collectors', or even ritual objects, according to their quality and the era in which they were made. The ceramics fall into three broad types—earthenware, stoneware, and porcelain—for vessels, architectural items such as roof tiles, and modeled objects and figures. In addition, there was an important group of sculptures made for religious use, the majority of which were produced in earthenware.

The earliest ceramics were fired to earthenware temperatures, but as early as the fifteenth century B.C., high-temperature stonewares were being made with glazed surfaces. During the Six Dynasties period (A.D. 265–589), kilns¹ in north China were producing high-fired ceramics of good quality. Whitewares produced in Hebei and Henan provinces from the seventh to the tenth centuries evolved into the highly prized porcelains of the Song dynasty (A.D. 960–1279), long regarded as one of the high points in the history of China's ceramic industry. The tradition of religious sculpture extends over most historical periods but is less clearly delineated than that of stonewares or porcelains, for it embraces the old custom of earthenware burial ceramics with later religious images and architectural ornament. Ceramic products also include lead-glazed tomb models of the Han dynasty, three-color lead-glazed vessels and figures of the Tang dynasty, and Ming three-color temple ornaments, in which the motifs were outlined in a raised trail of slip², as well as the many burial ceramics produced in imitation of vessels made in materials of higher intrinsic value.

Trade between the West and the settled and prosperous Chinese dynasties introduced new forms and different technologies. One of the most far-reaching examples is the impact of the fine ninth-century A.D. Chinese porcelain wares imported into the Arab world. So admired were these pieces that they encouraged the development of earthware made in imitation of porcelain and instigated research into the method of their manufacture. From the Middle East the Chinese acquired a blue pigment—a purified form of cobalt oxide unobtainable at that time in China—that contained only a low level of manganese. Cobalt ores found in China have a high manganese content, which produces a more muted blue-gray color. In the seventeenth century, the trading activities of the Dutch East India Company resulted in vast quantities of decorated Chinese porcelain being brought to Europe, which stimulated and influenced the work of a wide variety of wares, notably Delft. The Chinese themselves adapted many specific vessel forms from the West, such as bottles with long spouts, and designed a range of decorative patterns especially for the European market.

Just as painted designs on Greek pots may seem today to be purely decorative, whereas in fact they were carefully and precisely worked out so that at the time, their meaning was clear, so it is with Chinese pots. To twentieth-century eyes, Chinese pottery may appear merely decorative, yet to the Chinese the form of each object and its adornment had meaning and significance. The dragon represented the emperor, and the phoenix, the empress; the pomegranate indicated fertility, and a pair of fish, happiness; mandarin ducks stood for wedded bliss; the pine tree, peach, and crane are emblems of long life; and fish leaping from waves indicated success in the civil service examinations. Only when European decorative themes were introduced did these meanings become obscured or even lost.

From early times pots were used in both religious and secular contexts. The imperial court commissioned work and in the Yuan dynasty (A.D. 1279–1368) an imperial ceramic factory was established at Jingdezhen. Pots played an important part in some religious ceremonies. Long and often lyrical descriptions of the different types of ware exist that assist in classifying pots, although these sometimes confuse an already large and complicated picture.

kilns: enclosed ovens used to heat and harden clay objects
slip: a mixture of clay and water used to decorate pottery

Directions: Now answer the questions.

The function and **status** of ceramics in China varied from dynasty to dynasty, so they may be utilitarian, burial, trade, collectors', or even ritual objects, according to their quality and the era in which they were made. The ceramics fall into three broad types—earthenware, stoneware, and porcelain—for vessels, architectural items such as roof tiles, and modeled objects and figures. In addition, there was an important group of sculptures made for religious use, the majority of which were produced in earthenware.

1. The word "status" in the passage is closest in meaning to
 - (A) origin
 - (B) importance
 - (C) quality
 - (D) design
2. According to paragraph 2, which of the following is true of Chinese ceramics?
 - (A) The function of ceramics remained the same from dynasty to dynasty.
 - (B) The use of ceramics as trade objects is better documented than the use of ceramics as ritual objects.
 - (C) There was little variation in quality for any type of ceramics over time.
 - (D) Some religious sculptures were made using the earthenware type of ceramics.

TOEFL iBT Test 2

The earliest ceramics were fired to earthenware temperatures, but as early as the fifteenth century B.C., high-temperature stonewares were being made with glazed surfaces. During the Six Dynasties period (A.D. 265–589), kilns in north China were producing high-fired ceramics of good quality. Whitewares produced in Hebei and Henan provinces from the seventh to the tenth centuries evolved into the highly prized porcelains of the Song dynasty (A.D. 960–1279), long regarded as one of the high points in the history of China's ceramic industry. The tradition of religious sculpture extends over most historical periods but is less clearly delineated than that of stonewares or porcelains, for it embraces the old custom of earthenware burial ceramics with later religious images and architectural ornament. Ceramic products also include lead-glazed tomb models of the Han dynasty, three-color lead-glazed vessels and figures of the Tang dynasty, and Ming three-color temple ornaments, in which the motifs were outlined in a raised trail of slip, as well as the many burial ceramics produced in imitation of vessels made in materials of higher intrinsic value.

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

- (A) divided
- (B) extended
- (C) developed
- (D) vanished

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) While stonewares and porcelains are found throughout most historical periods, religious sculpture is limited to the ancient period.
- (B) Religious sculpture was created in most periods, but its history is less clear than that of stonewares or porcelains because some old forms continued to be used even when new ones were developed.
- (C) While stonewares and porcelains changed throughout history, religious sculpture remained uniform in form and use.
- (D) The historical development of religious sculpture is relatively unclear because religious sculptures sometimes resemble earthenware architectural ornaments.

5. Paragraph 3 supports all of the following concerning the history of the ceramic industry in China EXCEPT:

- (A) The earliest high-fired ceramics were of poor quality.
- (B) Ceramics produced during the Tang and Ming dynasties sometimes incorporated multiple colors.
- (C) Earthenware ceramics were produced in China before stonewares were.
- (D) The Song dynasty period was notable for the production of high-quality porcelain ceramics.

Trade between the West and the settled and prosperous Chinese dynasties introduced new forms and different technologies. One of the most far-reaching examples is the impact of the fine ninth-century A.D. Chinese porcelain wares imported into the Arab world. So admired were these pieces that they encouraged the development of earthenware made in imitation of porcelain and instigated research into the method of their manufacture. From the Middle East the Chinese acquired a blue pigment—a purified form of cobalt oxide unobtainable at that time in China—that contained only a low level of manganese. Cobalt ores found in China have a high manganese content, which produces a more muted blue-gray color. In the seventeenth century, the trading activities of the Dutch East India Company resulted in vast quantities of decorated Chinese porcelain being brought to Europe, which stimulated and influenced the work of a wide variety of wares, notably Delft. The Chinese themselves adapted many specific vessel forms from the West, such as bottles with long spouts, and designed a range of decorative patterns especially for the European market.

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

(A) improved
 (B) investigated
 (C) narrowed
 (D) caused

7. According to paragraph 4, one consequence of the trade of Chinese ceramics was

(A) the transfer of a distinctive blue pigment from China to the Middle East
 (B) an immediate change from earthenware production to porcelain production in European countries
 (C) Chinese production of wares made for the European market
 (D) a decreased number of porcelain vessels available on the European market

Just as painted designs on Greek pots may seem today to be purely decorative, whereas in fact they were carefully and precisely worked out so that at the time, their meaning was clear, so it is with Chinese pots. To twentieth-century eyes, Chinese pottery may appear merely decorative, yet to the Chinese the form of each object and its adornment had meaning and significance. The dragon represented the emperor, and the phoenix, the empress; the pomegranate indicated fertility, and a pair of fish, happiness; mandarin ducks stood for wedded bliss; the pine tree, peach, and crane are emblems of long life; and fish leaping from waves indicated success in the civil service examinations. Only when European decorative themes were introduced did these meanings become obscured or even lost.

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

(A) while
 (B) previously
 (C) surprisingly
 (D) because

9. In paragraph 5, the author compares the designs on Chinese pots to those on Greek pots in order to

- (A) emphasize that while Chinese pots were decorative, Greek pots were functional
- (B) argue that the designs on Chinese pots had specific meanings and were not just decorative
- (C) argue that twentieth-century scholars are better able to understand these designs than were ancient scholars
- (D) explain how scholars have identified the meaning of specific images on Chinese pots

10. Which of the following is mentioned in paragraph 5 as being symbolically represented on Chinese ceramics?

- (A) Chinese rulers
- (B) love of homeland
- (C) loyalty to friends
- (D) success in trade

11. Paragraph 5 suggests which of the following about the decorations on Chinese pottery?

- (A) They had more importance for aristocrats than for ordinary citizens.
- (B) Their significance may have remained clear had the Chinese not come under foreign influence.
- (C) They contain some of the same images that appear on Greek pots.
- (D) Their significance is now as clear to twentieth-century observers as it was to the early Chinese.

From early times pots were used in both religious and secular contexts. The imperial court commissioned work and in the Yuan dynasty (A.D. 1279–1368) an imperial ceramic factory was established at Jingdezhen. Pots played an important part in some religious ceremonies. Long and often lyrical ~~descriptions~~ of the different types of ware exist that assist in classifying pots, although these sometimes confuse an already large and complicated picture.

12. The word "these" in the passage refers to

- (A) religious ceremonies
- (B) descriptions
- (C) types of ware
- (D) pots

Trade between the West and the settled and prosperous Chinese dynasties introduced new forms and different technologies. One of the most far-reaching examples is the impact of the fine ninth-century A.D. Chinese porcelain wares imported into the Arab world. (A) So admired were these pieces that they encouraged the development of earthenware made in imitation of porcelain and instigated research into the method of their manufacture. (B) From the Middle East the Chinese acquired a blue pigment—a purified form of cobalt oxide unobtainable at that time in China—that contained only a low level of manganese. Cobalt ores found in China have a high manganese content, which produces a more muted blue-gray color. (C) In the seventeenth century, the trading activities of the Dutch East India Company resulted in vast quantities of decorated Chinese porcelain being brought to Europe, which stimulated and influenced the work of a wide variety of wares, notably Delft. (D) The Chinese themselves adapted many specific vessel forms from the West, such as bottles with long spouts, and designed a range of decorative patterns especially for the European market.

13. Directions: Look at the part of the passage that is displayed above. The letters (A), (B), (C), and (D) indicate where the following sentence could be added.

Foreign trade was also responsible for certain innovations in coloring.

Where would the sentence best fit?

- (A) Choice A
- (B) Choice B
- (C) Choice C
- (D) Choice D

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.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

Ceramics have been produced in China for a very long time.

- A
- B
- C
- D
- E

Answer Choices

- The Chinese produced earthenware, stoneware, and porcelain pottery, and they used their ceramics for a variety of utilitarian, architectural, and ceremonial purposes.
- B The shape and decoration of ceramics produced for religious use in China were influenced by Chinese ceramics produced for export.
- C As a result of trade relations, Chinese ceramic production changed, and Chinese ceramics influenced the ceramic production of other countries.
- D Chinese burial ceramics have the longest and most varied history of production and were frequently decorated with written texts that help scholars date them.
- E Before China had contact with the West, the meaning of various designs used to decorate Chinese ceramics was well understood.
- F Ceramics made in imperial factories were used in both religious and non-religious contexts.

Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

VARIATIONS IN THE CLIMATE

One of the most difficult aspects of deciding whether current climatic events reveal evidence of the impact of human activities is that it is hard to get a measure of what constitutes the natural variability of the climate. We know that over the past millennia the climate has undergone major changes without any significant human intervention. We also know that the global climate system is immensely complicated and that everything is in some way connected, and so the system is capable of fluctuating in unexpected ways. We need therefore to know how much the climate can vary of its own accord in order to interpret with confidence the extent to which recent changes are natural as opposed to being the result of human activities.

Instrumental records do not go back far enough to provide us with reliable measurements of global climatic variability on timescales longer than a century. What we do know is that as we include longer time intervals, the record shows increasing evidence of slow swings in climate between different regimes. To build up a better picture of fluctuations appreciably further back in time requires us to use proxy records.

Over long periods of time, substances whose physical and chemical properties change with the ambient climate at the time can be deposited in a systematic way to provide a continuous record of changes in those properties over time, sometimes for hundreds or thousands of years. Generally, the layering occurs on an annual basis, hence the observed changes in the records can be dated. Information on temperature, rainfall, and other aspects of the climate that can be inferred from the systematic changes in properties is usually referred to as proxy data. Proxy temperature records have been reconstructed from ice core drilled out of the central Greenland Ice cap, calcite shells embedded in layered lake sediments in Western Europe, ocean floor sediment cores from the tropical Atlantic Ocean, ice cores from Peruvian glaciers, and ice cores from eastern Antarctica. While these records provide broadly consistent indications that temperature variations can occur on a global scale, there are nonetheless some intriguing differences, which suggest that the pattern of temperature variations in regional climates can also differ significantly from each other.

What the proxy records make abundantly clear is that there have been significant natural changes in the climate over timescales longer than a few thousand years. Equally striking, however, is the relative stability of the climate in the past 10,000 years (the Holocene period).

To the extent that the coverage of the global climate from these records can provide a measure of its true variability, it should at least indicate how all the natural causes of climate change have combined. These include the chaotic fluctuations of the atmosphere, the slower but equally erratic behavior of the oceans, changes in the land surfaces, and the extent of ice and snow. Also included will be any variations that have arisen from volcanic activity, solar activity, and, possibly, human activities.

TOEFL iBT Test 2

One way to estimate how all the various processes leading to climate variability will combine is by using computer models of the global climate. They can do only so much to represent the full complexity of the global climate and hence may give only limited information about natural variability. Studies suggest that to date the variability in computer simulations is considerably smaller than in data obtained from the proxy records.

In addition to the internal variability of the global climate system itself, there is the added factor of external influences, such as volcanoes and solar activity. There is a growing body of opinion that both these physical variations have a measurable impact on the climate. Thus we need to be able to include these in our deliberations. Some current analyses conclude that volcanoes and solar activity explain quite a considerable amount of the observed variability in the period from the seventeenth to the early twentieth centuries, but that they cannot be invoked to explain the rapid warming in recent decades.

Directions: Now answer the questions.

One of the most difficult aspects of deciding whether current climatic events reveal evidence of the impact of human activities is that it is hard to get a measure of what constitutes the natural variability of the climate. We know that over the past millennia the climate has undergone major changes without any significant human intervention. We also know that the global climate system is immensely complicated and that everything is in some way connected, and so the system is capable of fluctuating in unexpected ways. We need therefore to know how much the climate can vary of its own accord in order to interpret with confidence the extent to which recent changes are natural as opposed to being the result of human activities.

15. According to paragraph 1, which of the following must we find out in order to determine the Impact of human activities upon climate?

- (A) The major changes in climate over the past millennia
- (B) The degree to which the climate varies naturally
- (C) The best method for measuring climatic change
- (D) The millennium when humans began to interfere with the climate

Instrumental records do not go back far enough to provide us with reliable measurements of global climatic variability on timescales longer than a century. What we do know is that as we include longer time intervals, the record shows increasing evidence of slow swings in climate between different regimes. To build up a better picture of fluctuations appreciably further back in time requires us to use proxy records. 16c

16. According to paragraph 2, an advantage of proxy records over instrumental records is that

- (A) they are more reliable measures of climatic variability in the past century
- (B) they provide more accurate measures of local temperatures
- (C) they provide information on climate fluctuations further back in time
- (D) they reveal information about the human impact on the climate

Over long periods of time, substances whose physical and chemical properties change with the ambient climate at the time can be deposited in a systematic way to provide a continuous record of changes in those properties over time, sometimes for hundreds or thousands of years. Generally, the layering occurs on an annual basis, hence the observed changes in the records can be dated. Information on temperature, rainfall, and other aspects of the climate that can be inferred from the systematic changes in properties is usually referred to as proxy data. Proxy temperature records have been reconstructed from ice core drilled out of the central Greenland ice cap, calcite shells embedded in layered lake sediments in Western Europe, ocean floor sediment cores from the tropical Atlantic Ocean, ice cores from Peruvian glaciers, and ice cores from eastern Antarctica. While these records provide broadly consistent indications that temperature variations can occur on a global scale, there are nonetheless some intriguing differences, which suggest that the pattern of temperature variations in regional climates can also differ significantly from each other.

17. 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) Because physical and chemical properties of substances are unchanging, they are useful records of climate fluctuations over time.
 (B) For hundreds or thousands of years, people have been observing changes in the chemical and physical properties of substances in order to infer climate change.
 (C) Because it takes long periods of time for the climate to change, systematic changes in the properties of substances are difficult to observe.
 (D) Changes in systematically deposited substances that are affected by climate can indicate climate variations over time.

18. According to paragraph 3, scientists are able to reconstruct proxy temperature records by

(A) studying regional differences in temperature variations
 (B) studying and dating changes in the properties of substances
 (C) observing changes in present-day climate conditions
 (D) inferring past climate shifts from observations of current climatic changes

What the proxy records make abundantly clear is that there have been significant natural changes in the climate over timescales longer than a few thousand years. Equally striking, however, is the relative stability of the climate in the past 10,000 years (the Holocene period).

19. The word "striking" in the passage is closest in meaning to

(A) noticeable
 (B) confusing
 (C) true
 (D) unlikely

Over long periods of time, substances whose physical and chemical properties change with the ambient climate at the time can be deposited in a systematic way to provide a continuous record of changes in those properties over time, sometimes for hundreds or thousands of years. Generally, the layering occurs on an annual basis, hence the observed changes in the records can be dated. Information on temperature, rainfall, and other aspects of the climate that can be inferred from the systematic changes in properties is usually referred to as proxy data. Proxy temperature records have been reconstructed from ice core drilled out of the central Greenland ice cap, calcite shells embedded in layered lake sediments in Western Europe, ocean floor sediment cores from the tropical Atlantic Ocean, ice cores from Peruvian glaciers, and ice cores from eastern Antarctica. While these records provide broadly consistent indications that temperature variations can occur on a global scale, there are nonetheless some intriguing differences, which suggest that the pattern of temperature variations in regional climates can also differ significantly from each other. A

What the proxy records make abundantly clear is that there have been significant natural changes in the climate over timescales longer than a few thousand years. Equally striking, however, is the relative stability of the climate in the past 10,000 years (the Holocene period). B

20. According to paragraphs 3 and 4, proxy data have suggested all of the following about the climate EXCEPT:

- (A) Regional climates may change over time.
- (B) The climate has changed very little in the past 10,000 years.
- (C) Global temperatures vary more than regional temperatures.
- (D) Important natural changes in climate have occurred over large timescales.

To the extent that the coverage of the global climate from these records can provide a measure of its true variability, it should at least indicate how all the natural causes of climate change have combined. These include the chaotic fluctuations of the atmosphere, the slower but equally erratic behavior of the oceans, changes in the land surfaces, and the extent of ice and snow. Also included will be any variations that have arisen from volcanic activity, solar activity, and, possibly, human activities. A

21. The word "erratic" in the passage is closest in meaning to B

- (A) dramatic
- (B) important
- (C) unpredictable
- (D) common

constant
Diry

22. All of the following are mentioned in paragraph 5 as natural causes of climate change EXCEPT

- (A) atmospheric changes
- (B) the slow movement of landmasses
- (C) fluctuations in the amount of ice and snow
- (D) changes in ocean activity

PARAGRAPH 6

One way to estimate how all the various processes leading to climate variability will combine is by using computer models of the global climate. They can do only so much to represent the full complexity of the global climate and hence may give only limited information about natural variability. Studies suggest that to date the variability in computer simulations is considerably smaller than in data obtained from the proxy records.

23. According to paragraph 6, which of the following is true of computer models of the global climate?

- A The information they produce is still limited.
- B They are currently most useful in understanding past climatic behaviors.
- C They allow researchers to interpret the data obtained from proxy records.
- D They do not provide information about regional climates.

PARAGRAPH 7

In addition to the internal variability of the global climate system itself, there is the added factor of external influences, such as volcanoes and solar activity. There is a growing body of opinion that both these physical variations have a measurable impact on the climate. Thus we need to be able to include these in our deliberations. Some current analyses conclude that volcanoes and solar activity explain quite a considerable amount of the observed variability in the period from the seventeenth to the early twentieth centuries, but that they cannot be invoked to explain the rapid warming in recent decades.

24. The word "deliberations" in the passage is closest in meaning to

- A records
- B discussions
- C results
- D variations

25. The word "invoked" in the passage is closest in meaning to

- A demonstrated
- B called upon
- C supported
- D expected

26. What is the author's purpose in presenting the information in paragraph 7?

- A To compare the influence of volcanoes and solar activity on climate variability with the influence of factors external to the global climate system
- B To indicate that there are other types of influences on climate variability in addition to those previously discussed
- C To explain how external influences on climate variability differ from internal influences
- D To argue that the rapid warming of Earth in recent decades cannot be explained

In addition to the internal variability of the global climate system itself, there is the added factor of external influences, such as volcanoes and solar activity. (A) There is a growing body of opinion that both these physical variations have a measurable impact on the climate. (B) Thus we need to be able to include these in our deliberations. (C) Some current analyses conclude that volcanoes and solar activity explain quite a considerable amount of the observed variability in the period from the seventeenth to the early twentieth centuries, but that they cannot be invoked to explain the rapid warming in recent decades. (D)

27. Directions: Look at the part of the passage that is displayed above. The letters (A), (B), (C), and (D) indicate where the following sentence could be added.

One day
Indeed, the contribution of volcanoes and solar activity would more likely have been to actually reduce the rate of warming slightly.

Where would the sentence best fit?

- (A) Choice A
- (B) Choice B
- (C) Choice C
- (D) Choice D

28. 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.

Write your answer choices in the spaces where they belong. You can either write the letter of your answer choice or you can copy the sentence.

A number of different and complex factors influence changes in the global climate over long periods of time.

Answer Choices

- A** In the absence of instrumental records, proxy data allow scientists to infer information about past climates.
- B** Scientists see a consistent pattern in the global temperature variations that have occurred in the past.
- C** Computer models are used to estimate how the different causes of climate variability combine to account for the climate variability that occurs.
- D** Scientists have successfully separated natural climate variation from changes related to human activities.
- E** Scientists believe that activities outside the global climate system, such as volcanoes and solar activity, may have significant effects on the system.
- F** Scientists have concluded that human activity accounts for the rapid global warming in recent decades.

Directions: Read the passage. Then answer the questions. Give yourself 20 minutes to complete this practice set.

SEVENTEENTH-CENTURY EUROPEAN ECONOMIC GROWTH

In the late sixteenth century and into the seventeenth, Europe continued the growth that had lifted it out of the relatively less prosperous medieval period (from the mid 400s to the late 1400s). Among the key factors behind this growth were increased agricultural productivity and an expansion of trade.

Populations cannot grow unless the rural economy can produce enough additional food to feed more people. During the sixteenth century, farmers brought more land into cultivation at the expense of forests and fens (low-lying wetlands). Dutch land reclamation in the Netherlands in the sixteenth and seventeenth centuries provides the most spectacular example of the expansion of farmland: the Dutch reclaimed more than 36,000 acres from 1590 to 1615 alone.

Much of the potential for European economic development lay in what at first glance would seem to have been only sleepy villages. Such villages, however, generally lay in regions of relatively advanced agricultural production, permitting not only the survival of peasants but also the accumulation of an agricultural surplus for investment. They had access to urban merchants, markets, and trade routes.

Increased agricultural production in turn facilitated rural industry, an intrinsic part of the expansion of industry. Woolens and textile manufacturers, in particular, utilized rural cottage (in-home) production, which took advantage of cheap and plentiful rural labor. In the German states, the ravages of the Thirty Years' War (1618–1648) further moved textile production into the countryside. Members of poor peasant families spun or wove cloth and linens at home for scant remuneration in an attempt to supplement meager family income.

More extended trading networks also helped develop Europe's economy in this period. English and Dutch ships carrying rye from the Baltic states reached Spain and Portugal. Population growth generated an expansion of small-scale manufacturing, particularly of handicrafts, textiles, and metal production in England, Flanders, parts of northern Italy, the southwestern German states, and parts of Spain. Only iron smelting and mining required marshaling a significant amount of capital (wealth invested to create more wealth).

The development of banking and other financial services contributed to the expansion of trade. By the middle of the sixteenth century, financiers and traders commonly accepted bills of exchange in place of gold or silver for other goods. Bills of exchange, which had their origins in medieval Italy, were promissory notes (written promises to pay a specified amount of money by a certain date) that could be sold to third parties. In this way, they provided credit. At mid-century, an Antwerp financier only slightly exaggerated when he claimed, "One can no more trade without bills of exchange than sail journeys. An Amsterdam merchant purchasing soap from a merchant in Marseille could go to an exchanger and pay the exchanger the equivalent sum in guilders, the Dutch currency. The exchanger would then send a bill of exchange to a colleague in Marseille,