Answer Explanations

SAT Practice Test #4

Section 1: Reading Test

QUESTION 1.

Choice C is the best answer. The narrator initially expresses uncertainty, or uneasiness, over his decision to set out for the North Pole: "my motives in this undertaking are not entirely clear" (lines 9-10). At the end of the passage, the narrator recognizes that because of this journey he is "on the brink of knowing . . . not an ethereal mathematical spot," the North Pole, but himself (lines 56-57).

Choices A, B, and D are incorrect because the narrator does not suggest that he fears going on the expedition, doubts his own abilities, or feels disdain for the North Pole.

QUESTION 2.

Choice D is the best answer. Lines 56-57 provide evidence that the narrator eventually recognizes his motives for traveling to the North Pole: "What I am on the brink of knowing, I now see, is not an ephemeral mathematical spot but myself." The narrator initially was unsure of why he was traveling to the North Pole, but realizes that he has embarked on a journey to find himself.

Choices A, B, and C are incorrect because they do not provide the best evidence that the narrator eventually recognizes his motives for traveling to the North Pole. Rather, choices A, B, and C all focus on the narrator's preparations and expectations for the journey.

QUESTION 3.

Choice D is the best answer. In lines 1-6, the narrator says that he feels a "vast yearning" and that his emotions are "complicated." He explains that he does "not understand quite what it is that the yearning desires." In this context, his emotions are "not readily verifiable," or not completely understood.

Choices A, B, and C are incorrect because in this context, "not readily verifiable" does not mean unable to be authenticated, likely to be contradicted, or without empirical support.

QUESTION 4.

Choice C is the best answer. In lines 10-13, the narrator explains that "the machinery of [his] destiny has worked in secret" to prepare him for this journey, as "its clockwork" has propelled him to "this time and place." By using the phrases "the machinery" and "its clockwork," the narrator is showing that powerful and independent forces are causing him to journey to the North Pole.

Choices A, B, and D are incorrect because they do not indicate the main purpose of lines 10-13. While lines 10-13 mention that these powerful and independent forces have been working "for years, for a lifetime" to convince the narrator to journey to the North Pole, they do not expose a hidden side of the narrator, demonstrate the narrator's manner, or explain the amount of time the narrator has spent preparing for his expedition.

QUESTION 5.

Choice A is the best answer. In lines 20-21, the narrator states that many people have perished while journeying to the North Pole: "Nobody has succeeded in this thing, and many have died."

Choices B, C, and D are incorrect because the narrator does not indicate that previous explorers have made surprising discoveries, have failed to determine the exact location of the North Pole, or had different motivations than his own.

QUESTION 6.

Choice A is the best answer. In lines 20-21, the narrator provides evidence that many previous explorers seeking the North Pole have perished in the attempt: "Nobody has succeeded in this thing, and many have died."

Choices B, C, and D do not mention previous explorers; therefore, these lines do not provide the best evidence that explorers died while seeking the North Pole.

QUESTION 7.

Choice B is the best answer. In lines 27-39, the narrator states that he is "intent" on traveling to the North Pole but acknowledges that the journey is absurd: "Who wants the North Pole! What good is it! Can you eat it? Will it carry you from Gothenburg to Malmö like a railway?" By asking these questions, the narrator recognizes that the North Pole has no practical value.

Still, the narrator admits that finding the North Pole is necessary, as it "must nevertheless be sought for."

Choices A, C, and D are incorrect because the narrator does not view his expedition to the North Pole as immoral, socially beneficial, or scientifically important.

QUESTION 8.

Choice D is the best answer. In lines 27-31, the narrator asks a series of rhetorical questions about the North Pole: "Who wants the North Pole! What good is it! Can you eat it? Will it carry you from Gothenburg to Malmö like a railway?" In this context, the narrator is suggesting that reaching the North Pole has no foreseeable benefit or value to humanity; unlike trains that bring travelers to specific destinations, the North Pole does not provide humans with a specific benefit or form of convenience.

Choices A, B, and C are incorrect because the question posed in lines 30-31 does not debate modes of travel, examine the proximity of cities that can be reached by trains, or question how often people travel.

QUESTION 9.

Choice D is the best answer. In lines 48-49, the narrator states that the North Pole "is an abstraction, a mathematical fiction" and that "no one but a Swedish madman could take the slightest interest in it." In this context, the narrator is stating that people would not "take the slightest interest in," or be curious about, the North Pole.

Choices A, B, and C are incorrect because in this context, "take the slightest interest in" does not mean to accept responsibility for, to possess little regard for, or to pay no attention to something.

QUESTION 10.

Choice A is the best answer. In lines 49-51, the narrator describes his balloon journey toward the North Pole: "The wind is still from the south, bearing us steadily northward at the speed of a trotting dog." In this context, the wind is "bearing," or carrying, the narrator in a direction to the North.

Choices B, C, and D are incorrect because in this context, "bearing" does not mean affecting, yielding, or enduring.

QUESTION 11.

Choice C is the best answer. The author states that "demographic inversion is not a proxy for population growth" (lines 32-33). In other words, demographic inversion is distinct from population growth. The author also notes that demographic inversion is evident in many American cities, as it

"can occur in cities that are growing, those whose numbers are flat, and even in those undergoing a modest decline in size" (lines 33-35).

Choices A, B, and D are incorrect because they do not summarize the first paragraph.

QUESTION 12.

Choice D is the best answer. The author notes that one of "the most powerful demographic events of the past decade [was] the movement of African Americans out of central cities" (lines 14-17).

Choices A, B, and C are incorrect because the author does not state that the unemployed, immigrants, or young professionals moved away from central-city areas in large numbers in the early 2000s.

QUESTION 13.

Choice A is the best answer. The author states that democratic inversion "can occur in cities that are growing, those whose numbers are flat, and even in those undergoing a modest decline in size" (lines 33-35). In this context, cities whose "numbers," or population size, are "flat" have static, or unchanging, populations.

Choices B, C, and D are incorrect because in this context, "flat" does not mean deflated, featureless, or obscure.

QUESTION 14.

Choice B is the best answer. The author states that many major American cities are currently experiencing economic hardship, or "enormous fiscal problems," because of "public pension obligations they incurred in the more prosperous years of the past two decades" (lines 36-39). The author then provides the example of Chicago, a city that can no longer afford to pay the "public services to which most of [its] citizens have grown to feel entitled" (lines 41-43). The author is arguing that many major American cities face economic hardship due to past promises (such as public services) they made to their constituents.

Choices A, C, and D are incorrect because the passage does not discuss expected tax increases, an inner-city tax base, or manufacturing production as they relate to the financial status of many major American cities.

QUESTION 15.

Choice A is the best answer. In lines 36-39, the author provides evidence that many major American cities are currently experiencing economic hardship due to promises made in past years: "America's major cities face enormous fiscal problems, many of them the result of public pension obligations

they incurred in the more prosperous years of the past two decades." America's major cities made past promises, such as "public pension obligations," to their citizens, which caused their current financial situation.

Choices B, C, and D are incorrect because they do not provide evidence that many major American cities are currently experiencing economic hardship due to promises made in past years.

QUESTION 16.

Choice C is the best answer. The author explains how sociologist Ernest W. Burgess determined that urban areas have a traditional four-zone structure (lines 54-63). He then states that Burgess was "right about the urban America of 1974" (line 65) as it also followed the traditional four-zone structure: "Virtually every city in the country had a downtown, where the commercial life of the metropolis was conducted; it had a factory district just beyond; it had districts of working-class residences just beyond that; and it had residential suburbs for the wealthy and the upper middle class at the far end of the continuum" (lines 66-71).

Choices A, B, and D are incorrect because the passage does not imply that American cities in 1974 were witnessing the flight of minority populations to the suburbs, had begun to lose their manufacturing sectors, or were already experiencing demographic inversion.

QUESTION 17.

Choice C is the best answer. In lines 66-71, the author provides evidence that American cities in 1974 had a traditional four-zone structure: "Virtually every city in the country had a downtown, where the commercial life of the metropolis was conducted; it had a factory district just beyond; it had districts of working-class residences just beyond that; and it had residential suburbs for the wealthy and the upper middle class at the far end of the continuum."

Choices A, B, and D are incorrect because they do not provide evidence that American urban cities in 1974 had a traditional four-zone structure. Choice A references a seminal paper on the layout of American cities, choice B identifies Burgess's original theory, and choice D focuses on movement to the suburbs.

QUESTION 18.

Choice A is the best answer. In lines 66-68, the author notes that American cities in 1974 each had a "downtown, where the commercial life of the metropolis was conducted." In this context, the author is stating that these cities "conducted," or carried out, business, the "commercial life," in downtown areas.

Choices B, C, and D are incorrect because in this context, "conducted" does not mean supervised, regulated, or inhibited.

QUESTION 19.

Choice B is the best answer. Chart 1 shows the percentage of the US population in 2010 that lived in non-metro, small metro, and large metro areas. While the author cites census numbers, he notes that "when it comes to measuring demographic inversion, raw census numbers are an ineffective blunt instrument" (lines 11-13). Census data refer to the number of people living in a specific area and the demographic information that's been collected on them. The author would most likely consider the information in chart 1 to be possibly accurate but an "ineffective blunt instrument" that's not truly informative.

Choices A and C are incorrect because the author would not consider census data to be excellent or compelling. Choice D is incorrect because while the author does not believe the census completely explains demographic inversion, he would be unlikely to disagree with the census data.

QUESTION 20.

Choice A is the best answer. Chart 2 shows that the growth of all metropolitan areas in the 1990s was higher than the growth in all metropolitan areas in the 2000s: large metro areas experienced a growth of 14.3% in the 1990s versus a growth of 10.9% in the 2000s, small metro areas experienced a growth of 13.1% in the 1990s versus a growth of 10.3% in the 2000s, and non-metro areas experienced a growth of 9.0% in the 1990s versus a growth of 4.5% in the 2000s.

Choices B, C, and D are incorrect because they do not accurately characterize the US growth rate by metro size from 2000-2010 as illustrated in chart 2.

QUESTION 21.

Choice D is the best answer. Chart 2 shows that in the 1990s the US population increased in large metro, small metro, and non-metro areas when compared to the population growth experienced in the 1980s. Large metro areas experienced a growth of 12.5% in the 1980s versus a growth of 14.3% in the 1990s, small metro areas experienced a growth of 8.8% in the 1980s versus a growth of 13.1% in the 1990s, and non-metro areas experienced a growth of 1.8% in the 1980s versus a growth of 9.0% in the 1990s. Given this information, the population grew more in all metro areas in the 1990s when compared to the growth of those areas in the 1980s.

Choices A, B, and C are incorrect because they do not draw an accurate conclusion about the US growth rate in the 1990s.

QUESTION 22.

Choice A is the best answer. Lines 9-11 introduce the focus of the passage: "Welcome to the world of 'pharming,' in which simple genetic tweaks turn animals into living pharmaceutical factories." The passage then discusses the chronological development of "pharming," and describes ATryn, a useful drug produced after decades of laboratory experiments.

Choices B and C are incorrect because the passage does not primarily evaluate research or summarize long-term research findings. Choice D is incorrect because "pharming" is not a branch of scientific study.

QUESTION 23.

Choice C is the best answer. The author is appreciative of pharming and describes it as turning "animals into living pharmaceutical factories" (lines 10-11). She expresses a positive view of pharming in line 70, when she describes its end result: "*Et voilà*—human medicine!"

Choices A, B, and D are incorrect because the author's attitude about pharming is not accurately characterized as one of fear, disinterest, or surprise.

QUESTION 24.

Choice C is the best answer. In lines 19-21, the author explains that dairy animals are "expert," or capable, "protein producers."

Choices A, B, and D are incorrect because in this context "expert" does not mean knowledgeable, professional, or trained.

QUESTION 25.

Choice B is the best answer. In line 36, the author explains that the initial transgenic studies were "lab-bound thought experiments come true." Those first studies, in other words, were considered to be of theoretical value only. They were not expected to yield products ready for human use.

Choices A and D are incorrect because the cost of animal research and the molecular properties of certain animals are not discussed in the passage. Choice C is incorrect because the passage does not suggest that all of the transgenic studies were focused on anticoagulants.

QUESTION 26.

Choice C is the best answer. In lines 35-36, the author provides evidence that the transgenic studies done in the 1980s and 1990s were not expected to yield products ready for human use. The author explains that the initial transgenic studies were "merely gee-whiz, scientific geekery, lab-bound thought experiments come true."

Choices A, B, and D are incorrect because they do not provide evidence that the transgenic studies done in the 1980s and 1990s were not expected to yield products ready for human use. Choices A and B do not address the transgenic studies, and choice D focuses on ATryn, a drug that was intended for human use.

QUESTION 27.

Choice A is the best answer. Lines 42-44 explain that ATryn "acts as a molecular bouncer, sidling up to clot-forming compounds and escorting them out of the bloodstream." Antithrombin can thus be seen as an agent that reduces the amount of dangerous clots in the bloodstream.

Choices B, C, and D are incorrect because the passage does not suggest that antithrombin stems from a rare genetic mutation, is a sequence of DNA, or occurs naturally in goats' mammary glands.

QUESTION 28.

Choice B is the best answer. Lines 42-44 provide evidence that antithrombin reduces compounds that lead to blood clots, as it acts as a "molecular bouncer, sidling up to clot-forming compounds and escorting them out of the bloodstream."

Choices A, C, and D do not provide evidence that antithrombin reduces compounds that lead to blood clots; these lines describe proteins, people unable to produce antithrombin, and the production of ATryn.

QUESTION 29.

Choice B is the best answer. In lines 60-62, the description of female goats' kids mentions that "some of them proved to be transgenic, the human gene nestled safely in their cells." The statement "some of them" indicates that while a number of the newborn goats were transgenic, others were not.

Choices A, C, and D are incorrect because the passage does not suggest that the female goats used in the initial experiment secreted antithrombin in their milk after giving birth, were the first animals to receive the microinjections, or had cells that contained genes usually found in humans.

QUESTION 30.

Choice D is the best answer. In lines 63-64, the parenthetical is added after the phrase "a promoter," which is "(. . . a sequence of DNA that controls gene activity)." The parenthetical's purpose is to define the term "promoter."

Choices A, B, and C are incorrect because they do not correctly identify the purpose of the parenthetical information in lines 63-64.

QUESTION 31.

Choice D is the best answer. Gold is a valuable element that commands high prices, so calling something "liquid gold" implies that it has great value. Because the pharmaceutical company GTC was producing the drug in order to sell it, it can be inferred that describing ATryn as "liquid gold" means it proved to be a lucrative product for GTC.

Choices A, B, and C are incorrect because the phrase "liquid gold" does not refer to the microinjection technique, efficiency in dairy production, or transgenic goats being beneficial to dairy farmers.

QUESTION 32.

Choice D is the best answer. In lines 25-29, Burke describes the contract between a person and society as one that is "not a partnership in things subservient only to the gross animal existence of a temporary and perishable nature. It is a partnership in all science; a partnership in all art; a partnership in every virtue, and in all perfection." Describing that contract as a partnership in all things indicates its seriousness, while describing it as not being a "temporary and perishable nature" implies its permanence.

Choice A is incorrect because line 27 states that the contract between a person and society is not "temporary or perishable," meaning it is not brief. Choices B and C are incorrect because the passage does not compare the contracts in terms of complexity or precision.

QUESTION 33.

Choice D is the best answer. In lines 1-9, Burke explains that people have "consecrated the state" to "avoid . . . the evils of inconstancy and versatility," and that people should examine "the faults of the state . . . with pious awe and trembling solitude." Burke then explains that society is taught to "look with horror on those children of their country who want to hack that aged parent in pieces" (lines 10-12). Burke is arguing that children want to revise the state, or "this aged parent," by amending its faults. In this context, "state" refers to a political entity, or government, that attempts to protect its citizens from "the evils of inconstancy and versatility."

Choices A, B, and C are incorrect because in this context, "state" does not mean style of living, position in life, or temporary condition.

QUESTION 34.

Choice A is the best answer. In lines 17-29, Burke argues that "subordinate contracts," are simply business agreements over traded goods, while the state is not merely "a partnership agreement in a trade . . . or some other such low concern . . . but a partnership in all science; a partnership in all art;

a partnership in every virtue, and in all perfection." In this context, Burke is stating that the state is not a contract consisting of "low" or petty concerns.

Choices B, C, and D are incorrect because in this context, "low" does not mean weak, inadequate, or depleted.

QUESTION 35.

Choice D is the best answer. In lines 41-43, Paine asserts that "Every age and generation must be as free to act for itself, *in all cases*, as the ages and generations which preceded it." He later states that deceased citizens of a state should no longer have "any authority in directing who shall be its governors, or how its government shall be organized, or how administered" (lines 61-63). Paine doesn't believe, in other words, that the decisions of previous generations should dictate the conditions of modern life and government.

Choices A, B, and C are incorrect because they do not accurately characterize the way Paine views historical precedents.

QUESTION 36.

Choice B is the best answer. In lines 30-34, Burke describes societal contracts as long-term agreements that preserve the interests of past generations and link the living and the dead into a "partnership." Paine, however, states that past generations have no "control" over the decisions made by living (line 71) because the dead have "no longer any participation in the concerns of this world" (lines 59-60).

Choices A, C, and D are incorrect because they do not accurately characterize how Paine would respond to Burke's claim that societal contracts link past and current generations.

QUESTION 37.

Choice D is the best answer. Lines 67-72 provide the best evidence that Paine would respond to Burke's statement that society is a "partnership" between past and current generations (lines 30-34) with the explanation that the current generation cannot know what judgments the dead would make about contemporary issues. In these lines Paine explains: "What possible obligation, then, can exist between them; what rule or principle can be laid down, that two nonentities, the one out of existence, and the other not in, and who never can meet in this world, that the one should control the other to the end of time?"

Choices A, B, and C are incorrect because the lines cited do not provide the best evidence that Paine would respond to Burke's statement that society is a "partnership" between past and current generations (lines 30-34) by arguing that the current generation cannot know what judgments the dead would make about contemporary issues.

QUESTION 38.

Choice D is the best answer. Paine concludes Passage 2 with the argument that because social issues change over time, the living should not try to adhere to decisions made by former generations (lines 73-80). Burke, however, states that living citizens exist within a "universal kingdom" (line 35) comprised of the living, the dead, and those who are not yet born. Burke argues that the living do not have the right to change their government based on "their speculations of a contingent improvement" (lines 36-37). Therefore, Burke would disapprove of Paine's concluding argument, as he believes the living do not have sufficient justification for changing the existing governmental structure.

Choices A, B, and C are incorrect because they do not accurately describe how Burke would likely have responded to Paine's remarks in the final paragraph of Passage 2.

QUESTION 39.

Choice D is the best answer. Lines 34-38 provide the best evidence that Burke would disapprove of Paine's remarks in the final paragraph of Passage 2: "The municipal corporations of that universal kingdom are not morally at liberty at [the living's] pleasure, and on their speculations of a contingent improvement, wholly to separate and tear asunder the bands of their subordinate community." In these lines, Burke is arguing that the living do not have sufficient justification to change the existing governmental structure.

Choices A, B, and C do not provide the best evidence that Burke would disapprove of Paine's remarks in the final paragraph of Passage 2, as Burke believes the living do not have sufficient justification for changing the existing governmental structure.

QUESTION 40.

Choice A is the best answer. The primary argument of Passage 1 is that an inviolable contract exists between a people and its government, one that is to be "looked on with other reverence" (lines 24-25). Passage 1 suggests that this contract exists between past and future generations as well; in effect, current and future generations should be governed by decisions made in the past. Passage 2 challenges these points, as it argues that current and future generations are not obligated to preserve past generations' beliefs: "The Parliament or the people of 1688, or of any other period, had no more right to dispose of the people of the present day, or to bind or to control them in any shape whatever, than the parliament or the people of the present day have to dispose of, bind, or control those who are to live a hundred or a thousand years hence" (lines 48-54).

Choices B, C, and D are incorrect because Passage 2 does not offer an alternative approach to Passage 1, support an idea introduced in Passage 1, or exemplify an attitude promoted in Passage 1.

QUESTION 41.

Choice B is the best answer. Passage 1 argues that the government is sacred (lines 3-6) and that no person should interfere with it (lines 6-9). Passage 2 argues that people have the right to make changes to their government: "The circumstances of the world are continually changing, and the opinions of men change also; and as government is for the living, and not for the dead, it is the living only that has any right in it" (lines 73-76).

Choices A, C, and D are incorrect because they do not identify the main purpose of both passages.

QUESTION 42.

Choice C is the best answer. The author explains that a "powerful volcano" erupted around 750 years ago and caused "a centuries-long cold snap known as the Little Ice Age" (lines 1-3). The author then states that a group of scientists believe the volcano Samalas was this "powerful volcano," and she explains how the scientists' research supports this claim (lines 17-78).

Choices A, B, and D are incorrect because they do not identify the main purpose of the passage.

QUESTION 43.

Choice B is the best answer. The author begins the passage by explaining how the Little Ice Age was a "centuries-long cold snap" that was likely caused by a volcanic eruption (lines 1-3). The author then explains how scientists used radiocarbon analysis to determine when the Little Ice Age began and how a volcanic eruption triggered the cooling temperatures (lines 17-25).

Choices A, C, and D are incorrect because the passage does not criticize a scientific model, offer a new method of measuring sulfates, or shift from the use of radiocarbon dating to an examination of volcanic glass.

QUESTION 44.

Choice A is the best answer. In lines 17-25, the passage shifts focus from describing a recorded event to providing evidence that the Little Ice Age was likely caused by a volcanic eruption. The passage states that scientists used "radiocarbon dating of dead plant material from beneath the ice caps on Baffin Island and Iceland, as well as ice and sediment core data" to determine when the Little Ice Age began and how it was connected to the "mystery" volcanic eruption.

Choices B, C, and D are incorrect because they do not provide the best evidence that the passage shifts focus from a description of a recorded event to its likely cause. Choices B, C, and D all focus on the scientists' research but do not explain what caused the Little Ice Age.

QUESTION 45.

Choice D is the best answer. According to lines 5-8, "That a powerful volcano erupted somewhere in the world, sometime in the Middle Ages, is written in polar ice cores in the form of layers of sulfate deposits and tiny shards of volcanic glass." The phrase "is written in" reinforces the idea that the polar ice caps contain evidence of the volcanic eruption, and that scientists can interpret this evidence by examining the "sulfate deposits and tiny shards of volcanic glass."

Choices A, B, and C are incorrect because the author does not use the phrase "is written in" to demonstrate the concept of the hands-on nature of the scientists' work, highlight the fact that scientists often write about their work, or underscore the sense of importance scientists have about their work.

QUESTION 46.

Choice A is the best answer. The scientists believe the volcano Samalas, located in Indonesia, was most likely the medieval volcanic eruption (lines 33-35). The eruption likely occurred near the equator because an equatorial location is "consistent with the apparent climate impacts" the scientists observed (lines 61-67).

Choices B, C, and D are incorrect because the scientists do not suggest that the medieval volcanic eruption was located in the Arctic region, the Antarctic region, or Ecuador.

QUESTION 47.

Choice D is the best answer. In lines 61-64, the author cites geochemist Gifford Miller's findings that provide evidence that the medieval volcanic eruption most likely occurred in Indonesia near the equator: "It's not a total surprise that an Indonesian volcano might be the source of the eruption, Miller says. 'An equatorial eruption is more consistent with the apparent climate impacts.'"

Choices A, B, and C are incorrect because they do not provide evidence that the medieval volcanic eruption most likely occurred in Indonesia near the equator. Rather, choices A, B, and C focus on the medieval volcano's power, impact, and magnitude.

QUESTION 48.

Choice C is the best answer. In lines 68-71, the author states, "Another possible candidate—both in terms of timing and geographical location—is Ecuador's

Quilotoa, estimated to have last erupted between 1147 and 1320 C.E." The phrase "another possible candidate" implies that the scientists believe that in the Middle Ages a different volcanic eruption, such as an eruption from the volcano Quilotoa, could have been responsible for the onset of the Little Ice Age.

Choices A, B, and D are incorrect because the phrase "another possible candidate" does not imply the frequency or effects of volcanic eruptions, or that some volcanoes have large calderas.

QUESTION 49.

Choice D is the best answer. In lines 71-75, the author explains how Lavigne's team proved that Quilotoa's eruption did not cause the Little Ice Age:

"But when Lavigne's team examined shards of volcanic glass from this volcano, they found that they didn't match the chemical composition of the glass found in polar ice cores, whereas the Samalas glass is a much closer match." These findings show that Samalas, not Quilotoa, was responsible for the onset of the Little Ice Age.

Choices A, B, and C are incorrect because they focus on the difficulty of identifying the volcano responsible for the Little Ice Age, the magnitude of the volcanic eruption, and the researchers' experiment.

QUESTION 50.

Choice C is the best answer. The data in the figure show the greatest below-average temperature variation occurred in 1675 CE, as the temperature reached a variation of −1.0° Celsius.

Choice A is incorrect because the figure shows that the temperature in 1200 CE was above average (+0.25° Celsius). Choices B and D are incorrect because the below-average temperature variation reported in 1675 CE (at −1.0° Celsius) was greater than the below-average temperature variation reported for 1375 CE (around −0.25° Celsius) and 1750 CE (around (−0.5° Celsius).

QUESTION 51.

Choice B is the best answer. The passage says that the Little Ice Age began "about 750 years ago" (line 1) and that "the cold summers and ice growth began abruptly between 1275 and 1300 C.E." (lines 23-24). The figure indicates that average temperatures in central England began to drop around 1275 CE, and this drop in temperatures continued "through the 1700s" (line 32).

Choices A, C, and D are incorrect because the passage and figure do not indicate that the Little Ice Again began around 1150 CE, just before 1500 CE, or around 1650 CE.

QUESTION 52.

Choice A is the best answer. The figure shows that the greatest cooling period of the Little Ice Age occurred between 1500 and 1700 CE; it also shows that the greatest warming period of the Medieval Warm Period occurred between 1150 and 1250 CE. Therefore, the Little Ice Age's greatest cooling occurred a couple of centuries, or "hundreds of years," after the temperature peaks of the Medieval Warm Period.

Choices B, C, and D are incorrect because the figure does not focus on equatorial volcanic eruptions, pyroclastic flows, or radiocarbon analysis.

Section 2: Writing and Language Test

QUESTION 1.

Choice B is the best answer because the relative clause appropriately modifies the noun "work" in the preceding independent clause.

Choices A, C, and D are incorrect because each creates a comma splice.

QUESTION 2.

Choice B is the best answer because it creates the appropriate contrasting transition from the fact that the first two panels were painted during the day to the fact that the third panel was painted at night.

Choices A, C, and D are incorrect because each creates an inappropriate transition from the previous sentence. Choice A and choice D imply addition rather than contrast. Choice C results in an incomplete sentence.

QUESTION 3.

Choice B is the best answer because it creates an appropriate appositive to the subject "mural," and is correctly set off by commas on both sides.

Choices A, C, and D are incorrect because each is incorrectly punctuated. Choice A lacks a comma after "centerpiece," choice C unnecessarily introduces an independent clause, and choice D contains an em dash that has no parallel earlier in the sentence.

QUESTION 4.

Choice A is the best answer because it explicitly introduces the explanation for the behavior (painting at night) described in the previous paragraph.

Choices B, C, and D are incorrect because none alludes to the artist's painting at night, which is described at the end of the previous paragraph and explained in this paragraph.

QUESTION 5.

Choice D is the best answer because it refers to an action that can be performed on a physical object such as a mural.

Choices A, B, and C are incorrect because each refers to an action that is performed on information rather than on a physical object.

QUESTION 6.

Choice B is the best answer because it creates a past tense construction consistent with the verb "was dominated."

Choices A, C, and D are incorrect because none is consistent with the verb tense established earlier in the sentence.

QUESTION 7.

Choice D is the best answer because it is the most precise choice, specifying the noun that the demonstrative pronoun "this" refers to.

Choices A, B, and C are incorrect because each provides a vague, nonspecific pronoun that does not concretely define a referent.

QUESTION 8.

Choice B is the best answer because it correctly places and punctuates the appositive phrase that describes the "Chicano mural movement."

Choices A, C, and D are incorrect because each contains awkward syntax that obscures the relationship between the key noun phrases "an explosion of mural painting" and "the Chicano mural movement."

QUESTION 9.

Choice C is the best answer because it creates parallel construction within the list of locations ("*in* abandoned lots, *on* unused buildings, or *on* infrastructure").

Choices A, B, and D are incorrect because none follows the construction established within the list of locations.

QUESTION 10.

Choice A is the best answer because it alludes to the uniquely high level of investment, described in the next sentence, that the new group of artists is making in restoring and publicizing "América Tropical."

Choices B, C, and D are incorrect because each fails to express the connection between the general restoration efforts mentioned in the previous sentence and the specific role of "América Tropical" in these efforts, which is described in the next sentence.

QUESTION 11.

Choice C is the best answer because details of the initial reaction to Siqueiros's mural and its subsequent rediscovery are given previously in the passage and are not needed to set up the forward-looking sentence that follows.

Choices A, B, and D are incorrect because each provides an inaccurate interpretation of the sentence that the writer is considering adding.

QUESTION 12.

Choice D is the best answer because without the underlined portion, the sentence contains an appropriate parallel contrast between the phrases "organically grown crops" and "conventionally grown counterparts," each of which describes crops.

Choices A, B, and C are incorrect because each creates an illogical comparison: crops to "people," crops to "purchase," and crops to "purchasing."

QUESTION 13.

Choice B is the best answer because it provides the subject "consumers," creating a complete sentence and providing a referent for the pronoun "they" that appears later in the sentence.

Choices A, C, and D are incorrect because each lacks the subject that the sentence requires and none provide a referent for "they."

QUESTION 14.

Choice D is the best answer because it efficiently creates a contrast with "organically grown."

Choices A, B, and C are incorrect because they are unnecessarily wordy and repeat information given in previous sentences.

QUESTION 15.

Choice C is the best answer because it sets up the contrast between the added expense of organic food and the evidence that suggests a lack of benefits from eating organic food.

Choices A, B, and D are incorrect because each fails to acknowledge the contrast between the last sentence in the paragraph and the previous sentences.

QUESTION 16.

Choice C is the best answer because "maintain" is commonly used to describe advocating a position in an argument.

Choices A, B, and D are incorrect because none is appropriate in the context of describing an opinion advocated by a group of people.

QUESTION 17.

Choice A is the best answer because the transitional phrase "For instance" sets up an example supporting the point, made in the previous sentence, that organic food may not contain more vitamins and minerals than conventionally grown food.

Choices B, C, and D are incorrect because none indicates that the sentence is providing an example supporting the point made in the previous sentence.

QUESTION 18.

Choice C is the best answer because it accurately identifies the reason that the writer should not add the proposed sentence: the paragraph is about evidence of nutritional content, not the availability of organic food.

Choices A, B, and D are incorrect because each provides an inaccurate interpretation of the proposed sentence's relationship to the passage.

QUESTION 19.

Choice A is the best answer because the plural verb "have" is consistent with the plural subject "amounts."

Choices B, C, and D are incorrect because each is a singular verb, which is inconsistent with the plural subject "amounts."

QUESTION 20.

Choice C is the best answer because the example it supplies, that pesticides can be minimized by washing or peeling produce, supports the claim that nonorganic food is safe.

Choices A, B, and D are incorrect because none supports the paragraph's claim about the safety of nonorganic food.

QUESTION 21.

Choice B is the best answer because the plural noun phrase "numerous other reasons" must be preceded by a plural verb and a pronoun that does not indicate possession: "there are."

Choices A, C, and D are incorrect because each contains the singular verb "is," the possessive pronoun "their," or both.

QUESTION 22.

Choice D is the best answer because a nonrestrictive clause must be preceded by a comma; in addition, "such as" is never followed by a comma.

In this case, the list of reasons supporting the claim that there are benefits to buying organic food is nonrestrictive; the list tells the reader something about organic food but does not restrict or place limits on organic food.

Choices A, B, and C are incorrect because each places erroneous punctuation after the phrase "such as." Choices B and C also lack the necessary comma preceding "such as."

QUESTION 23.

Choice C is the best answer because "intriguing" conveys a realistic level of interest for the entertaining but ultimately inconsequential question of regional differences in words for carbonated beverages.

Choices A, B, and D are incorrect because each mocks the topic of regional words for carbonated beverages.

QUESTION 24.

Choice C is the best answer because "but also" is the appropriate transition to complete the correlative pair "not only . . . but also," which begins earlier in the sentence.

Choices A, B, and D are incorrect because each fails to complete the phrase "not only . . . but also."

QUESTION 25.

Choice B is the best answer because it is consistent with the fact that there remains a "veritable army of trained volunteers traveling the country" and because it uses "still" to contrast this method with the "new avenues."

Choices A, C, and D are incorrect because none is consistent with the information contained later in the passage.

QUESTION 26.

Choice D is the best answer because it uses the relative pronoun "who" to avoid needless repetition of the word "scholars."

Choices A, B, and C are incorrect because each unnecessarily repeats the word "scholars."

QUESTION 27.

Choice C is the best answer because the new sentence provides a logical transition from sentences 3 and 4, which describe the data collection, to sentence 5, which explains that completing the dictionary took far longer than expected.

Choices A, B, and D are incorrect because each fails to create a logical transition between the preceding and subsequent sentences.

QUESTION 28.

Choice A is the best answer because the singular verb "requires" agrees with the singular subject "research."

Choices B, C, and D are incorrect because they do not create subject-verb agreement.

QUESTION 29.

Choice D is the best answer because a colon is the correct punctuation to introduce the elaborating phrase that follows the word "army."

Choices A, B, and C are incorrect because none provides the appropriate punctuation.

QUESTION 30.

Choice B is the best answer because it contains both the correct word to refer to an Internet location—"site"—and the correct preposition to complete the collocation "in search of."

Choices A, C, and D are incorrect because each contains a word that does not refer to an Internet location, and choices C and D contain the wrong preposition.

QUESTION 31.

Choice C is the best answer because it correctly associates each beverage term with the region described in the sentence according to the information contained in the map.

Choices A, B, and D are incorrect because each contradicts the information contained in the map.

QUESTION 32.

Choice B is the best answer because it contains the two plural possessive pronouns needed to refer to the subject "findings"—"their" and "their."

Choices A, C, and D are incorrect because each contains a word frequently confused with "their."

QUESTION 33.

Choice A is the best answer because it provides a summary and evaluation of gathering data from the Internet, which is the focus of the paragraph.

Choices B, C, and D are incorrect because each is either irrelevant to the main point of the paragraph or unnecessarily repeats information.

QUESTION 34.

Choice C is the best answer because it uses the present tense, which is consistent with the verbs that appear later in the sentence.

Choices A, B, and D are incorrect because they create awkward shifts in tense.

QUESTION 35.

Choice C is the best answer because the em dashes correctly bracket the examples of the types of elements.

Choices A, B, and D are incorrect because each uses either inconsistent or incorrect punctuation to set off the types of elements.

QUESTION 36.

Choice B is the best answer because a period is an appropriate way to separate the two independent clauses that meet at the underlined text.

Choices A, C, and D are incorrect because each either creates a comma splice or lacks necessary punctuation.

QUESTION 37.

Choice D is the best answer because the proposed sentence to be added is a paraphrase of the sentence before it, containing the same ideas.

Choices A, B, and C are incorrect because none fully acknowledges the relationship between the proposed sentence to be added and the other sentences in the paragraph.

QUESTION 38.

Choice A is the best answer because it highlights the importance of the game designer's communication with others, which is the paragraph's main point.

Choices B, C, and D are incorrect because none describes communication originating with the game designer, which is the main focus of the paragraph.

QUESTION 39.

Choice C is the best answer because the importance of communication is established in the previous sentences. The transition "consequently" best captures the fact that the designer must be skilled in this area.

Choices A, B, and D are incorrect because each contains a transition that either repeats information or creates an illogical relationship between this sentence and the previous sentences.

QUESTION 40.

Choice B is the best answer because it provides the singular nouns "writer" and "speaker" to agree with the singular pronoun "anyone."

Choices A, C, and D are incorrect because none creates pronoun-referent agreement.

QUESTION 41.

Choice D is the best answer because it expresses in the clearest, simplest way the idea that many game designers start out as programmers.

Choices A, B, and C are incorrect because each is unnecessarily wordy and obscures meaning.

QUESTION 42.

Choice D is the best answer because it logically and appropriately modifies the phrase "collaboration skills."

Choices A, B, and C are incorrect because none appropriately describes the value of collaboration skills.

QUESTION 43.

Choice A is the best answer because it provides a logical subject for the modifying phrase "demanding and deadline driven."

Choices B, C, and D are incorrect because each creates a dangling modifier.

QUESTION 44.

Choice B is the best answer because sentence 5 expresses the main point upon which the paragraph elaborates.

Choices A, C, and D are incorrect because none places sentence 5 in the appropriate position to set up the details contained in the paragraph.

Section 3: Math Test — No Calculator

QUESTION 1.

Choice A is correct. The expression $|x - 1| - 1$ will equal 0 if $|x - 1| = 1$. This is true for $x = 2$ and for $x = 0$. For example, substituting $x = 2$ into the expression $|x - 1| - 1$ and simplifying the result yields $|2 - 1| - 1 = |1| - 1 = 1 - 1 = 0$. Therefore, there is a value of x for which $|x - 1| - 1$ is equal to 0.

Choice B is incorrect. By definition, the absolute value of any expression is a nonnegative number. Substituting any value for x into the expression