Question ID 3e7c8331

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: 3e7c8331

Treasure Island is an 1883 novel by Robert Louis Stevenson. When the narrator was a child, his father ran a hotel. A mysterious sailor came to stay at the hotel. The narrator was frightened of the sailor, as can be seen when the narrator says, _____

Which quotation from *Treasure Island* most effectively illustrates the claim?

A. "I remember [the sailor] as if it were yesterday, as he came plodding to the inn door, his sea-chest following behind him in a hand-barrow."

B. "[The sailor] was a very silent man by custom. All day he hung round the cove or upon the cliffs with a brass telescope."

C. "All the time he lived with us [the sailor] made no change whatever in his dress but to buy some stockings from a hawker. One of the [corners] of his hat having fallen down, he let it hang from that day forth, though it was a great annoyance when it blew."

D. "How [the sailor] haunted my dreams, I need scarcely tell you. On stormy nights, when the wind shook the four corners of the house and the surf roared along the cove and up the cliffs, I would see him in a thousand forms, and with a thousand diabolical expressions."

ID: 3e7c8331 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it most effectively illustrates the claim that the narrator was frightened of the sailor. The quotation describes the sailor haunting the narrator's dreams, appearing in "a thousand forms" with "a thousand diabolical expressions." This vivid imagery conveys the intense psychological fear the narrator experienced when thinking about the sailor. Furthermore, the quotation evokes the narrator's terror and dread by describing a stormy night setting with wind shaking the house and a roaring surf.

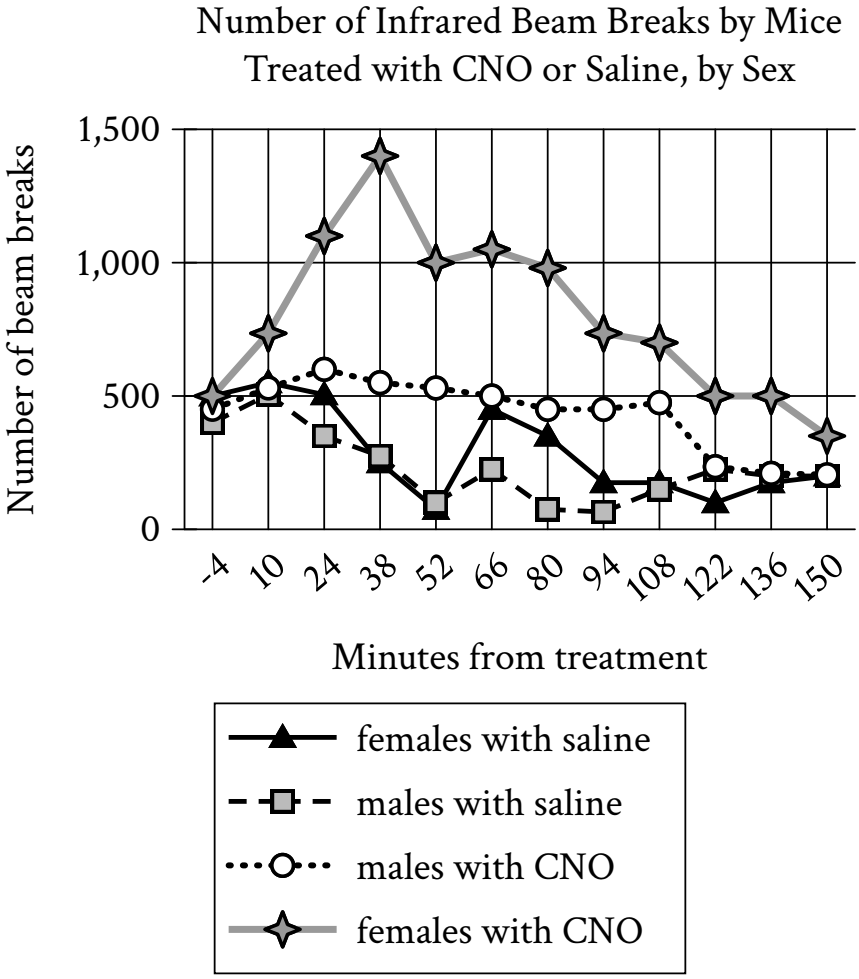
Choice A is incorrect because this quotation does not provide any details to suggest that the narrator was afraid of the sailor. It simply describes the narrator's memory of the sailor arriving at the inn with his sea chest. Choice B is incorrect because this quotation does not effectively illustrate the claim that the narrator was frightened of the sailor. The quotation provides several details about the sailor, including that it was his custom to remain silent. However, the quotation does not relate these details to the narrator's experience of being frightened of the sailor. Choice C is incorrect because this quotation focuses on aspects of the sailor's appearance and dress. There is no connection made in the quotation between these physical details and the narrator's sense of being frightened of the sailor.

Question Difficulty: Easy

Question ID 71e0dd93

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 71e0dd93



To investigate the influence of certain estrogen-responsive neurons on energy expenditure, biologist Stephanie Correa et al. treated female and male mice with either saline solution or clozapine-N4-oxide (CNO), which activates the neurons. Monitoring the activity levels of the mice by measuring how frequently the animals broke infrared beams crossing their enclosures, Correa et al. found that the mice in their study showed sex-specific differences in response to neuron activation: _____

Which choice most effectively uses data from the graph to complete the assertion?

A. the four groups of mice differed greatly in their activity levels before treatment but showed identical activity levels at the end of the monitoring period.

B. saline-treated females showed substantially more activity at certain points in the monitoring period than saline-treated males did.

C. CNO-treated females showed more activity relative to saline-treated females than CNO-treated males

showed relative to saline-treated males.

D. CNO-treated females showed a substantial increase and then decline in activity over the monitoring period, whereas CNO-treated males showed a substantial decline in activity followed by a steep increase.

ID: 71e0dd93 Answer

Correct Answer: C

Rationale

Choice C is the best answer. The graph shows that the CNO-treated females were way more active than the CNO-treated males, while the saline-treated males and females (the control groups) had very similar activity levels. This supports the claim that there were sex-specific differences in the mice's response to neuron activation.

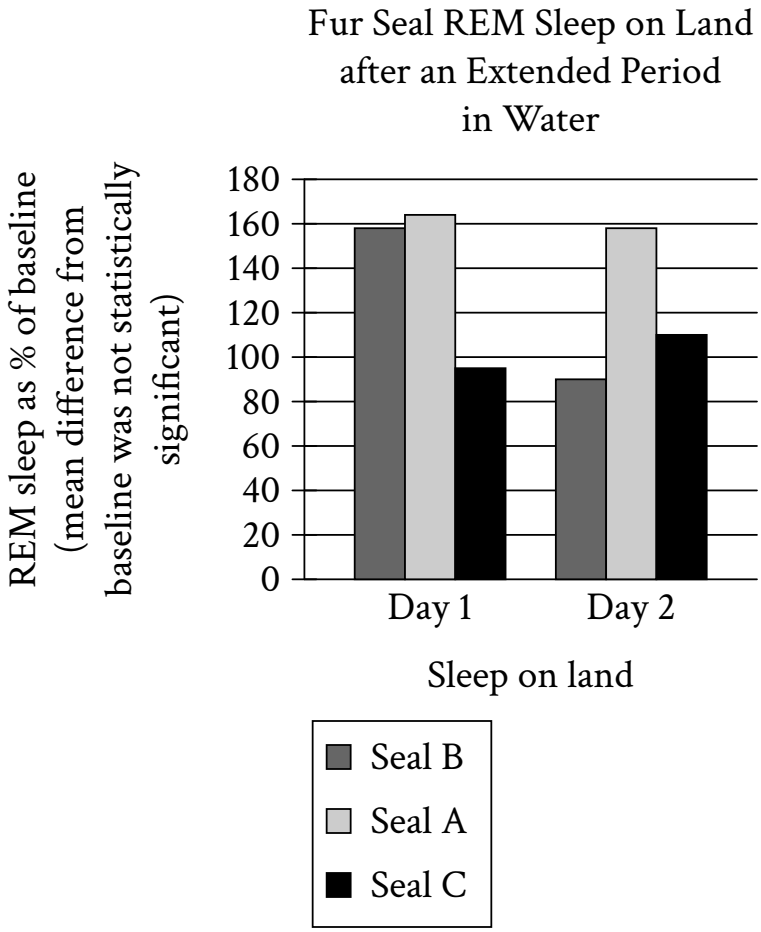
Choice A is incorrect. This choice misreads the graph. All four groups of mice started at nearly the same activity level before treatment (see how all four points are very close together at -4 minutes, meaning four minutes before treatment). Choice B is incorrect. This choice doesn't complete the assertion. The assertion is about the mice's response to neuron activation, so we need to include the data about the CNO-treated females and males. Choice D is incorrect. This choice misreads the graph. The line for the CNO-treated males does not show a "substantial decline" until around 122 minutes, and there is no "steep increase" afterward.

Question Difficulty: Medium

Question ID f7347d3a

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: f7347d3a



Research suggests that REM sleep in animals is homeostatically regulated: animals compensate for periods of REM sleep deprivation by increasing subsequent REM sleep. When on land, fur seals get enough REM sleep, but during the weeks they're in the water, they get almost none. In a study of fur seals' sleep habits, researchers recorded the REM sleep (as a percentage of baseline) of fur seals once they had returned to land. They concluded that REM sleep may not be homeostatically regulated in fur seals, citing as evidence the fact that the seals in the study _____

Which choice most effectively uses data from the graph to complete the text?

A. didn't show significantly less REM sleep during the second day after returning to land than they did during the first day.

B. showed no significant differences from one another in baseline levels of REM sleep.

C. didn't consistently demonstrate a significant increase in REM sleep after their period of deprivation in the water.

D. showed no significant difference between REM sleep after returning to land and REM sleep while in the water.

ID: f7347d3a Answer

Correct Answer: C

Rationale

Choice C is the best answer. If REM sleep were homeostatically regulated in fur seals, then all the seals would compensate with REM levels significantly over baseline after going weeks without REM. We'd also expect the seals to maintain those elevated REM levels for some time. Since seals B and C return very quickly to baseline REM levels, this suggests that REM sleep in fur seals may not be regulated homeostatically.

Choice A is incorrect. This doesn't support the conclusion. If REM sleep were homeostatically regulated in fur seals, then we'd suspect the seals to sustain REM levels well above baseline for a prolonged period in order to compensate for weeks of REM deprivation while in the water. Whether or not there's a reduction in REM sleep from day 1 to day 2 doesn't tell us how REM sleep on those days relates to baseline, which is where our focus should be. Choice B is incorrect. The y-axis of this graph doesn't depict baseline levels of REM sleep, but rather shows REM sleep as a percent of baseline. Choice D is incorrect. The graph doesn't depict REM sleep while in the water for the seals in the study. Additionally, we're told fur seals get no REM sleep while in the water, which is significantly different to the values shown in the graph for after they return to land.

Question Difficulty: Hard

Question ID 19f88f7b

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: 19f88f7b

Depths at Which Four Deep-Sea Fish Species Live

Species	Depth below the ocean surface
Footballfish	200–1,000 meters
Southern stoplight loosejaw	500–2,000 meters
Black seadevil	250–2,000 meters
Bollons' rattail	300–800 meters

Some oceanic fish species live very deep underwater. Researchers collected data about the depths at which various species live.

Based on the information in the table, at what depth does the southern stoplight loosejaw live?

A. More than 2,000 meters below the surface

B. 150 to 400 meters below the surface

C. 500 to 2,000 meters below the surface

D. 250 to 500 meters below the surface

ID: 19f88f7b Answer

Correct Answer: C

Rationale

Choice C is the best answer. The table shows the depths below the ocean surface at which four species of deep-sea fish live. According to the table, the range of depths at which the southern stoplight loosejaw lives is 500–2,000 meters below the surface.

Choice A is incorrect because the table indicates that the southern stoplight loosejaw lives 500–2,000 meters below the ocean surface, not at depths more than 2,000 meters below the surface. Choice B is incorrect because the table indicates that the southern stoplight loosejaw lives 500–2,000 meters below the ocean surface, not 150–400 meters below the surface. Choice D is incorrect because the table indicates that the southern stoplight loosejaw lives 500–2,000 meters below the ocean surface, not 250–500 meters below the surface.

Question Difficulty: Easy

Question ID 16bbe580

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 16bbe580

"The Yellow Wallpaper" is an 1892 short story by Charlotte Perkins Gilman. In the story, the narrator expresses mixed feelings about her surroundings: _____

Which quotation from "The Yellow Wallpaper" most effectively illustrates the claim?

A. "This wallpaper has a kind of sub-pattern in a different shade, a particularly irritating one, for you can only see it in certain lights, and not clearly then."

B. "By moonlight—the moon shines in all night when there is a moon—I wouldn't know it was the same paper."

C. "I'm really getting quite fond of the big room, all but that horrid [wall]paper."

D. "The color is repellant, almost revolting; a smouldering, unclean yellow, strangely faded by the slow-turning sunlight."

ID: 16bbe580 Answer

Correct Answer: C

Rationale

Choice C is the best answer because it most effectively illustrates the claim that the narrator of "The Yellow Wallpaper" has mixed feelings about her surroundings. She says she is "really getting quite fond of the big room," a positive sentiment, but also describes the room's wallpaper as "horrid," a negative sentiment. Since some of her feelings about her surroundings are positive and others are negative, they are best described as mixed.

Choice A is incorrect because though the narrator describes the room's wallpaper as "irritating," a negative sentiment, she does not mention a positive sentiment. Thus, the quotation does not effectively illustrate the claim that the narrator has mixed feelings about her surroundings. Choice B is incorrect because it describes how the appearance of the room's wallpaper changes at night but does not mention the narrator's feelings about her surroundings. Choice D is incorrect because though the narrator describes the room's wallpaper as "repellant," a negative sentiment, she does not mention a positive sentiment. Thus, the quotation does not effectively illustrate the claim that the narrator has mixed feelings about her surroundings.

Question Difficulty: Medium

Question ID 2a57b2a8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: 2a57b2a8

An archaeological team led by Piotr Bieliński and Sultan al-Bakri found remnants of a 4,000-year-old Bronze Age board game at a site in Oman. Little is left of the game except a stone board, which is carved with a grid and has places to hold game pieces. Some scholars claim that the game was largely played by traders.

Which finding, if true, would most directly support the scholars' claim?

A. Other examples of the game dating to the same period have been found in the remains of several homes in the region, including in one home that may have belonged to a trader.

B. Similar games have been found in other sites dating to the same period that were connected to the site in Oman via trade routes.

C. The other known examples of the game dating to the same period have been found along routes that seem to have been used primarily by traders at the time.

D. Remnants of other goods have been found at the site in Oman that probably also reached the location through trade.

ID: 2a57b2a8 Answer

Correct Answer: C

Rationale

Choice C is the best answer because it presents a finding that, if true, would most directly support the scholars' claim about the board game. The text explains that the remains of a 4,000-year-old board game were found in Oman. The text then states that scholars claim this board game was played mostly by traders. If the other known examples of this board game from the same time period were discovered along routes that seem to have been used primarily by traders, this finding would directly support the scholars' claim because it suggests that the game was largely played by traders who brought it with them for entertainment as they traveled.

Choice A is incorrect because this finding would suggest only that a single trader may have possessed examples of the board game, perhaps for the purpose of trading or selling the game to residents of Oman. For this reason, the finding wouldn't directly support the scholars' claim that the majority of the game's players were traders. Choice B is incorrect because this finding doesn't mention the board game at all, referring only to similar games found at other sites, and would therefore provide no direct support for the scholars' claim about the board game. Choice D is incorrect because this finding doesn't mention the board game at all, referring only to the remains of other goods found at the site in Oman, and would therefore provide no direct support for the scholars' claim about the board game.

Question Difficulty: Hard

Question ID 43687700

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: 43687700

Time Participants Spent Reading about Five London Museums

Museum Name	Ranking	Percentage of total time spent reading about museum by participants provided with ranking	Percentage of total time spent reading about museum by participants not provided with ranking
British Museum	1	36	18
National Gallery	2	21	20
Tate Modern	4	16	17
Victoria and Albert Museum	5	14	23
Natural History Museum	3	13	22

Researchers recently conducted an experiment to understand how we use rankings to make decisions. They created a fictitious travel website describing five museums in London. Then, they invited two groups of participants, who had never visited the museums, to review the site and select the museum they would be most likely to visit. Meanwhile, the researchers tracked the amount of time each participant spent reading about each museum. For one group, the website ranked each museum, titling the page “The Top 5 Museums in London.” For the other group, the museums and their descriptions were not ranked. The researchers concluded that when reviewing ranked lists, we tend to focus on the top-ranked option.

Which choice best describes data in the table that support the researchers’ conclusion?

A. Participants who were not provided with a ranking of the museums spent roughly equal amounts of time reading about each museum.

B. Participants who were provided with a ranking of the museums spent disproportionately more time reading about the British museum.

C. Participants who were provided with a ranking of the museums spent the least amount of time reading about the Natural History Museum.

D. Participants who were not provided with a ranking of the museums spent the most time reading about the Victoria and Albert Museum.

ID: 43687700 Answer

Correct Answer: B

Rationale

Choice B is the best answer. By looking at the top-ranked option, we can see that people provided with ranked lists spent more time reading about the British Museum than reading about other museums (36% of the time versus 21% for the second-ranked option).

Choice A is incorrect. The claim is about people with ranked lists, and these data are about those with unranked lists. Choice C is incorrect. The claim is about people with ranked lists looking at the top-ranked option, and these data are about the third-ranked option. Choice D is incorrect. The claim is about people with ranked lists, and these data are about those with unranked lists.

Question Difficulty: Easy

Question ID 882802f9

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 882802f9

Properties of Select Rotating Radio Transients

Name	Right ascension (hours)	Period (seconds)	Frequency (hertz)
J0545-03	5:45	1.074	0.931
J1654-2335	16:54:03	0.545	1.834
J0103+54	1:03:37	0.354	2.822
J0121+53	1:21	2.725	0.367
J0614-03	6:15	0.136	7.353

A student is researching rotating radio transients (RRATs), a subclass of pulsar stars characterized by short pulses of radio waves. The time between consecutive pulses of an RRAT is referred to as a period. Looking at the table, the student determines that _____

Which choice most effectively uses data from the table to complete the statement?

A. J0614-03 has the shortest amount of time between consecutive pulses of all the RRATs in the table.

B. J0545-03 and J0121+53 have the same amount of time between consecutive pulses.

C. J1654-2335 has the longest amount of time between consecutive pulses of all the RRATs in the table.

D. J0103+54 and J0121+53 both have more than one second of time between consecutive pulses.

ID: 882802f9 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it most accurately uses data from the table to complete the statement about certain rotating radio transients (RRATs). The table contains information about the right ascensions, periods, and frequencies of various pulsar stars called RRATs. According to the text, the period of an RRAT is defined as the time between consecutive pulses. The table shows that the period of RRAT J0614-03 is 0.136 seconds, which is the lowest number of all the periods of the RRATs listed in the table. If the period is the time between consecutive pulses, and J0614-03 has the shortest period, then J0614-03 has the shortest amount of time between consecutive pulses of all the RRATs in the table.

Choice B is incorrect because according to the table, J0545-03 has a period of 1.074 seconds and J0121+53 has a period of 2.725 seconds. According to the text, the period of an RRAT is the time between consecutive pulses. Therefore, since J0545-03 and J0121+53 have different periods, they do not have the same amount of time between consecutive pulses. Choice C is incorrect because according to the table, J1654-2335 has a period of 0.545 seconds, which is not the longest

period of all the RRATs listed in the table. According to the text, the period of an RRAT is the time between consecutive pulses, and both J0545-03 and J0121+53 have longer periods than J1654-2335, so J1654-2335 does not have the longest time between consecutive pulses of all the RRATs in the table. Choice D is incorrect because according to the table, J0103+54 has a period of 0.354 seconds, and J0121+53 has a period of 2.725 seconds. According to the text, the period of an RRAT is the time between consecutive pulses, and only J0121+53 has more than one second of time between consecutive pulses, not J0103+54.

Question Difficulty: Medium

Question ID 0abd16fa

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: 0abd16fa

Percentage Point Changes in US Federal Outlays Relative to GDP by Congressional Status

Period	Congressional status	Change in total outlays	Change in nondefense outlays	Change in defense outlays
1981–1988	divided	−0.4	−1.3	0.9
1975–1976	divided	2.7	3.0	−0.3
1977–1980	undivided	0.3	0.6	−0.3
1964–1968	undivided	1.9	1.4	0.5
1969–1974	divided	−1.8	2.1	−3.9

Economist Steve H. Hanke has shown that divided US Congresses—which occur when one party holds the majority in the House of Representatives and another holds the majority in the Senate—tend to accompany reductions in total federal outlays (spending) relative to gross domestic product (GDP), which Hanke interprets to reflect decreases in government size. Hanke calculated the percentage point change in total outlays (encompassing nondefense and defense outlays) for consecutive US Congresses. Hanke has pointed to his calculations as evidence that a divided Congress may be a "necessary but not sufficient condition" for a decrease in government size to occur.

Which choice best describes data from the table that support the underlined claim?

A. The periods of undivided Congresses were associated with increases in nondefense outlays, whereas all the periods of divided Congresses except one were associated with reductions in defense outlays.

B. All the periods of divided Congresses were associated with reductions in total outlays, although two periods were also associated with increases in nondefense outlays.

C. The periods of undivided Congresses were associated with increases in total outlays, whereas all the periods of divided Congresses were associated with reductions in either nondefense outlays or defense outlays.

D. All the periods of divided Congresses except one were associated with reductions in total outlays, whereas the periods of undivided Congresses were associated with increases in total outlays.

ID: 0abd16fa Answer

Correct Answer: D

Rationale

Choice D is the best answer. The claim is that divided Congresses are necessary but insufficient—that is, we need divide Congresses, but they are not enough—to decrease government size, as measured by total federal outlays. This choice accurately expresses the supporting data from the “change in total outlays” part of the graph. Within the data set, divided Congresses sometimes decreased total outlays, but undivided ones never did.

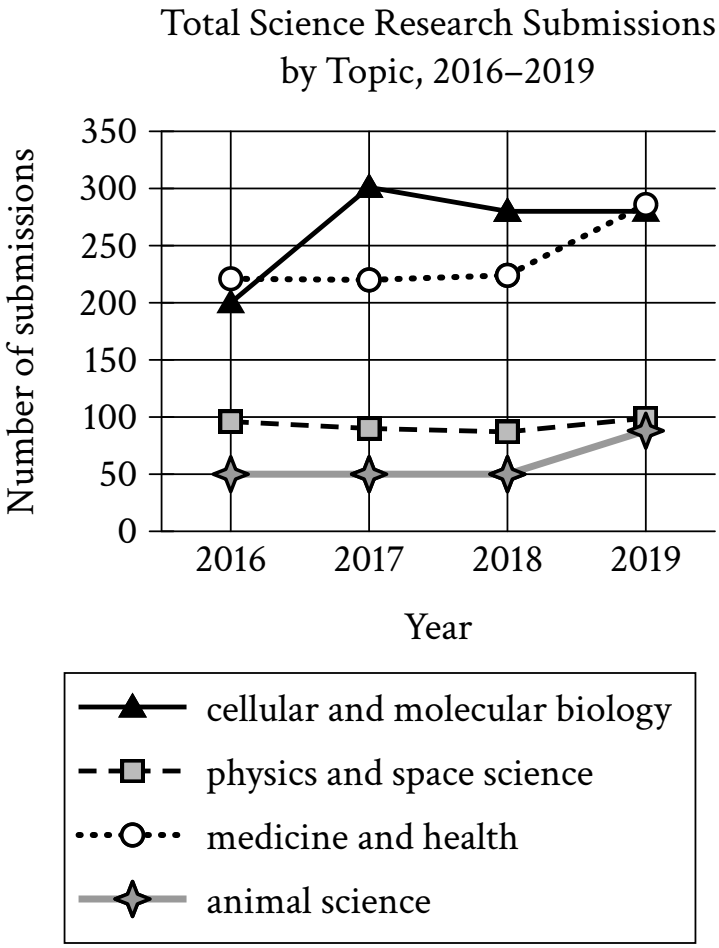
Choice A is incorrect. The claim is only about government size, as measured by total federal outlays—defense and nondefense outlays aren’t relevant. Choice B is incorrect. The claim is only about government size as measured by total federal outlays—nondefense outlays aren’t relevant. Choice C is incorrect. The claim is only about government size as measured by total federal outlays—specific information about defense or nondefense outlays isn’t relevant.

Question Difficulty: Hard

Question ID e7b08326

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: e7b08326



A student is researching the trends in the topics submitted to a national science fair for high school students. The graph shows the number of submissions by topic that were made each year. Based on the data in the graph, the student claims that there were more medicine and health research topics submitted in 2019 than in any other year.

Which choice most effectively uses data from the graph to support the underlined claim?

A. In 2016, the number of cellular and molecular biology topic submissions was the same as the number of animal science topic submissions.

B. In 2019, there were more physics and space science topic submissions than there were medicine and health topic submissions.

C. The lowest number of animal science topic submissions in a year was approximately 95 in 2016.

D. The highest number of medicine and health topic submissions during the period shown is approximately

285 in 2019.

ID: e7b08326 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it effectively uses data from the graph to support the underlined claim that more medicine and health topics were submitted to a national science fair in 2019 than in any of the other years shown. This choice indicates that the approximately 285 medicine and health topics submitted in 2019 are more than the number of medicine and health submissions in any other year shown—a description that is supported by information in the graph, which shows that medicine and health topic submissions were below 250 in 2016, 2017, and 2018, but above 250 (approximately 285 submissions) in 2019.

Choice A is incorrect because it doesn't support the underlined claim or accurately reflect the information in the graph. This choice refers to 2016 and discusses cellular and molecular biology and animal science, whereas the underlined claim refers to 2019 and discusses medicine and health. Moreover, the claim that in 2016 there were equal numbers of submissions in the cellular and molecular biology category and in the animal science category is contradicted by the graph, which shows approximately 200 submissions and 50 submissions, respectively, for those categories in 2016. Choice B is incorrect because it doesn't accurately reflect the information in the graph. This choice claims that in 2019 there were more physics and space submissions than there were medicine and health submissions, but the graph shows that there were approximately 100 space and science submissions that year and approximately 285 medicine and health submissions. Choice C is incorrect because it doesn't accurately reflect the information in the graph or support the underlined claim about medicine and health research topics. This choice claims that there were approximately 95 submissions for the animal science category in 2016, but the graph shows that the number was closer to 50 in 2016.

Question Difficulty: Easy

Question ID 5f411925

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 5f411925

"Ghosts of the Old Year" is an early 1900s poem by James Weldon Johnson. In the poem, the speaker describes experiencing an ongoing cycle of anticipation followed by regretful reflection: _____

Which quotation from "Ghosts of the Old Year" most effectively illustrates the claim?

A. "What does this brazen tongue declare, / That falling on the midnight air / Brings to my heart a sense of care / Akin to fright?"

B. "The snow has ceased its fluttering flight, / The wind sunk to a whisper light, / An ominous stillness fills the night, / A pause—a hush."

C. "It tells of many a squandered day, / Of slighted gems and treasured clay, / Of precious stores not laid away, / Of fields unreaped."

D. "And so the years go swiftly by, / Each, coming, brings ambitions high, / And each, departing, leaves a sigh / Linked to the past."

ID: 5f411925 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it presents the quotation that most effectively illustrates the claim that the speaker of the poem describes experiencing an ongoing cycle of anticipation followed by regretful reflection. In this quotation, the speaker notes that as years go by, "Each, coming"—that is, each new year as it comes—"brings ambitions high." In other words, the speaker begins each new year with large goals. But the speaker goes on to say that as each year ends ("each, departing"), it "leaves a sigh / Linked to the past." A sigh is an expression of longing or regret, so in the context of the whole quotation, this portion suggests that at the end of each year, the speaker regretfully reflects on not having achieved the ambitions formed at the beginning of the year. The phrases "the years go swiftly by," "Each, coming," and "each, departing" indicate that this experience happens over and over again: the speaker experiences a cycle of anticipation followed by regretful reflection.

Choice A is incorrect because this quotation does not describe an ongoing cycle of anticipation followed by regretful reflection. Instead, the speaker describes experiencing a sensation similar to fright as a result of something that has occurred at midnight. Specifically, the speaker has heard a "brazen tongue," a figurative way of saying that the speaker has heard the clang of a bronze bell being rung. Choice B is incorrect because although this quotation does convey a sense of anticipation through its reference to "ominous stillness," there is no suggestion of regretful reflection or any indication that the speaker is describing an ongoing cycle of anticipation followed by such reflection. Instead, the speaker is describing a particular moment when a winter storm appears to have momentarily calmed. Choice C is incorrect because although this quotation does convey a sense of regret ("many a squandered day"), nothing in the quotation suggests an ongoing cycle of

anticipation followed by regret. Instead, the speaker is simply lamenting wasted time and opportunities.

Question Difficulty: Medium

Question ID 5ad0b3b6

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: 5ad0b3b6

Nucleobase Concentrations from Murchison Meteorite and Soil Samples in Parts per Billion

Nucleobase	Murchison meteorite sample 1	Murchison meteorite sample 2	Murchison soil sample
Isoguanine	0.5	0.04	not detected
Purine	0.2	0.02	not detected
Xanthine	39	3	1
Adenine	15	1	40
Hypoxanthine	24	1	2

Employing high-performance liquid chromatography—a process that uses pressurized water to separate material into its component molecules—astrochemist Yashiro Oba and colleagues analyzed two samples of the Murchison meteorite that landed in Australia as well as soil from the landing zone of the meteorite to determine the concentrations of various organic molecules. By comparing the relative concentrations of types of molecules known as nucleobases in the Murchison meteorite with those in the soil, the team concluded that there is evidence that the nucleobases in the Murchison meteorite formed in space and are not the result of contamination on Earth.

Which choice best describes data from the table that support the team's conclusion?

A. Isoguanine and purine were detected in both meteorite samples but not in the soil sample.

B. Adenine and xanthine were detected in both of the meteorite samples and in the soil sample.

C. Hypoxanthine and purine were detected in both the Murchison meteorite sample 2 and in the soil sample.

D. Isoguanine and hypoxanthine were detected in the Murchison meteorite sample 1 but not in sample 2.

ID: 5ad0b3b6 Answer

Correct Answer: A

Rationale

Choice A is the best answer. The researchers concluded that the meteorite's nucleobases weren't the result of soil contamination. Presence of nucleobases in the meteorite and not in soil provides evidence that those nucleobases likely didn't come from the soil.

Choice B is incorrect. This choice doesn't justify the conclusion. The researchers concluded that the meteorite's nucleobases weren't the result of soil contamination. If the nucleobases are present in both the soil and meteorite, then it's possible that

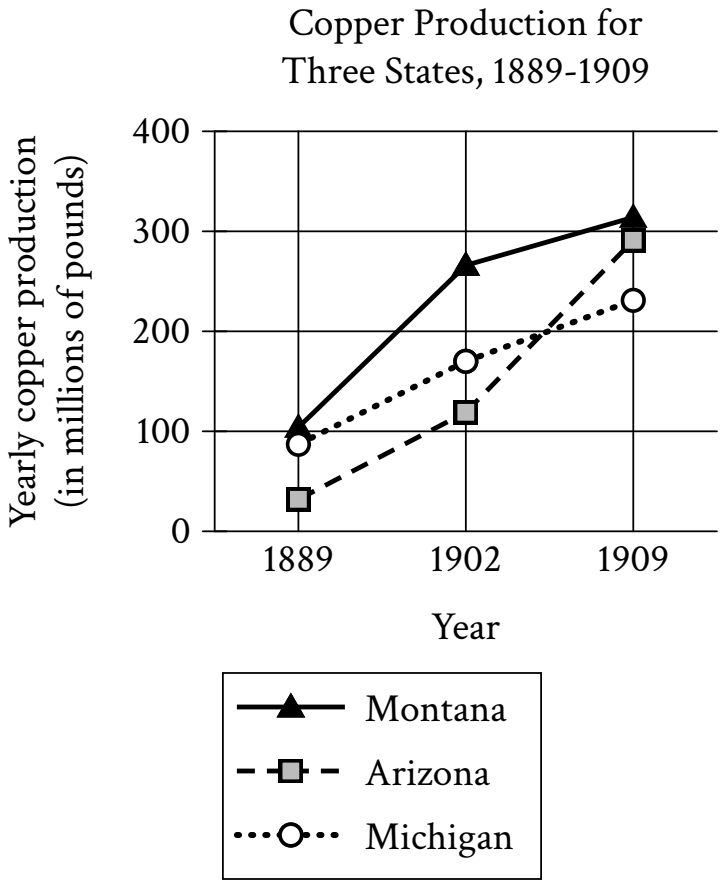
these nucleobases came from the soil. Choice C is incorrect. This choice misreads the table. Purine was not detected in the soil sample. Choice D is incorrect. This choice misreads the table. Both isoguanine and hypoxanthine were detected in both Murchison meteorite samples.

Question Difficulty: Hard

Question ID 8e3309b5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: 8e3309b5



Copper had been mined in the US for thousands of years, but large-scale commercial mining of copper took off starting in the late 1800s. This was due to several factors. Technological advancements in the mining industry led to improvements in the production of copper. This helped the country keep up with the growing number of people wanting to buy copper starting in the 1890s. At the same time, the growth of the railroad system made the transportation of copper in large batches much easier. Several states saw rapid growth in the production of this resource, for example: _____

Which choice most effectively uses the data in the graph to complete the example?

A. The rise in copper production in Michigan slowed from 1902 to 1909.

B. Montana and Arizona produced more copper than Michigan did in 1909.

C. Fewer than 100 million pounds of copper were produced in Arizona in 1889.

D. Copper production rose significantly from 1889 to 1909 for Arizona, Michigan, and Montana.

ID: 8e3309b5 Answer

Correct Answer: D

Rationale

Choice D is the best answer. The text asks us to provide examples of several states that saw rapid growth in copper production from the 1890s onward. The graph depicts Arizona, Michigan, and Montana all experiencing such rapid growth during this time period.

Choice A is incorrect. The claim is about states experiencing rapid growth in copper production. This statement only discusses one state and does not provide evidence of rapid growth—in fact, it discusses a slow-down of growth. Choice B is incorrect. The claim is about states experiencing rapid growth in copper production, and this statement provides a comparison of production rates between states, rather than an example of rapid growth. Choice C is incorrect. The claim is about several states experiencing rapid growth in copper production. This statement only discusses one state and does not provide evidence of growth in copper production.

Question Difficulty: Easy

Question ID 0eff1fa4

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 0eff1fa4

Five of the Responses to Survey about Actions to Conserve Energy

Action	Action category	Percentage of respondents selecting action (%)
Use efficient cars/hybrids	efficiency	2.8
Change thermostat setting	curtailment	6.3
Use bike or public transportation instead of car	curtailment	12.9
Use efficient light bulbs	efficiency	3.6
Turn off lights	curtailment	19.6

In a survey of public perceptions of energy use, researcher Shahzeen Attari and her team asked respondents to name the most effective action ordinary people can take to conserve energy. The team categorized each action as either an efficiency or a curtailment and found that respondents tended to name curtailments more often than they did efficiencies. For example, 19.6% of respondents stated that the most effective way to conserve energy is to turn off the lights, while only _____

Which choice most effectively uses data from the table to complete the text?

A. 6.3% of respondents said it was most effective to use efficient cars or hybrids.

B. 2.8% of respondents said it was most effective to change the thermostat setting.

C. 12.9% of respondents said it was most effective to use a bike or public transportation.

D. 3.6% of respondents said it was most effective to use efficient light bulbs.

ID: 0eff1fa4 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it most effectively uses data from the table to complete the text's discussion of Attari and her team's survey results. The text states that the team asked respondents to identify the most effective action people can take to save energy, with the team classifying each action as either an efficiency or a curtailment. According to the text, respondents named curtailments more often than they did efficiencies. The text then offers an example that begins by citing a curtailment, turning off the lights, that was selected by a relatively high percentage of respondents (19.6%). Given that the example is presented in support of the idea that more respondents selected curtailments than efficiencies, the most

effective way to complete the example is by citing an efficiency, using efficient light bulbs, that was selected by a relatively low percentage of respondents (only 3.6%).

Choice A is incorrect because it inaccurately describes data in the table. The data indicate that 6.3% of respondents said the most effective action was to change the thermostat setting, not to use efficient cars or hybrids. Choice B is incorrect because it inaccurately describes data in the table. The data indicate that 2.8% of respondents said the most effective action was to use efficient cars/hybrids, not to change the thermostat setting. Choice C is incorrect because it mentions a curtailment (using a bike or public transportation) and not an efficiency. The text states that a research team asked respondents to identify the most effective action people can take to save energy, with the team classifying each action as either an efficiency or a curtailment. According to the text, respondents named curtailments more often than they did efficiencies. The text then offers an example that begins by citing a curtailment, turning off the lights, that was selected by a relatively high percentage of respondents (19.6%). Given that the example is presented in support of the idea that more people selected curtailments than efficiencies, the most effective way to complete the example is not by referring to another curtailment but rather by referring to an efficiency that was selected by a relatively low percentage of respondents.

Question Difficulty: Medium

Question ID b8dd8651

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: b8dd8651

Several studies of sediment (e.g., dirt, pieces of rock, etc.) in streams have shown an inverse correlation between sediment grain size and downstream distance from the primary sediment source, suggesting that stream length has a sorting effect on sediment. In a study of sediment sampled at more than a dozen sites in Alpine streams, however, geologists Camille Litty and Fritz Schlunegger found that cross-site variations in grain size were not associated with differences in downstream distance, though they did not conclude that downstream distance is irrelevant to grain size. Rather, they concluded that sediment influx in these streams may have been sufficiently spatially diffuse to prevent the typical sorting effect from being observed.

Which finding about the streams in the study, if true, would most directly support Litty and Schlunegger's conclusion?

A. The streams regularly experience portions of their banks collapsing into the water at multiple points upstream of the sampling sites.

B. The streams contain several types of sediment that are not typically found in streams where the sorting effect has been demonstrated.

C. The streams mostly originate from the same source, but their lengths vary considerably due to the different courses they take.

D. The streams are fed by multiple tributaries that carry significant volumes of sediment and that enter the streams downstream of the sampling sites.

ID: b8dd8651 Answer

Correct Answer: A

Rationale

Choice A is the best answer. This finding would support the conclusion. If stream banks are collapsing into the water at multiple points, then sediment is getting into the water at those various points. This supports the conclusion that the inflow of sediment is very spread out.

Choice B is incorrect. This finding wouldn't support the conclusion. The conclusion is about the influx of sediment being "spatially diffuse," meaning spread out over a large area. The type of sediment wouldn't have an impact on the conclusions. Choice C is incorrect. This finding wouldn't support the conclusion. It doesn't say anything about the influx of sediment being "spatially diffuse" (spread out). Choice D is incorrect. This finding wouldn't support the conclusion. Any sediment that enters downstream of the sampling sites wouldn't end up in the samples, so it wouldn't affect the findings or the conclusion.

Question Difficulty: Hard

Question ID 3167db00

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Easy

ID: 3167db00

Effect of Paywall Introduction on Newspaper Companies' Revenues

Newspaper	Total revenue change ($ in thousands)	Percentage change (%)	Newspaper size
Los Angeles Times	93,966	12.5	large
The New York Times	235,788	20	large
The Denver Post	−3,765	−1	small
Sun Sentinel	−24,899	−11.9	small
Chicago Tribune	94,492	19	large

Digital paywalls restrict access to online content to those with a paid subscription. In an investigation of the effect of paywalls on newspaper company revenues for print and digital subscriptions and advertising, Doug J. Chung and colleagues compared actual outcomes (with a paywall) to control estimates (without a paywall). The researchers concluded that introducing a paywall is generally more beneficial for larger newspapers, which have high circulation and tend to offer a substantial amount of unique online content.

Which choice best describes data from the table that support Chung and colleagues' conclusion?

A. The *Chicago Tribune* and the *Los Angeles Times* had similar total revenue changes, but the *Los Angeles Times* had a smaller percentage change.

B. The *Los Angeles Times* had a 12.5% revenue change, while the *Chicago Tribune* had a 19% revenue change.

C. *The New York Times* had a 20% revenue change, while the *Denver Post* had a −1% revenue change.

D. *The Denver Post* had only a −1% revenue change, which was the smallest percentage change of the selected companies.

ID: 3167db00 Answer

Correct Answer: C

Rationale

Choice C is the best answer. The conclusion is that paywalls are more beneficial for large newspapers. This data supports that conclusion by comparing the revenue increase of a large newspaper to the revenue decrease of a small newspaper.

Choice A is incorrect. This choice doesn't support the conclusion. It doesn't include any small newspapers for comparison.
Choice B is incorrect. This choice doesn't support the conclusion. It doesn't include any small newspapers for comparison.

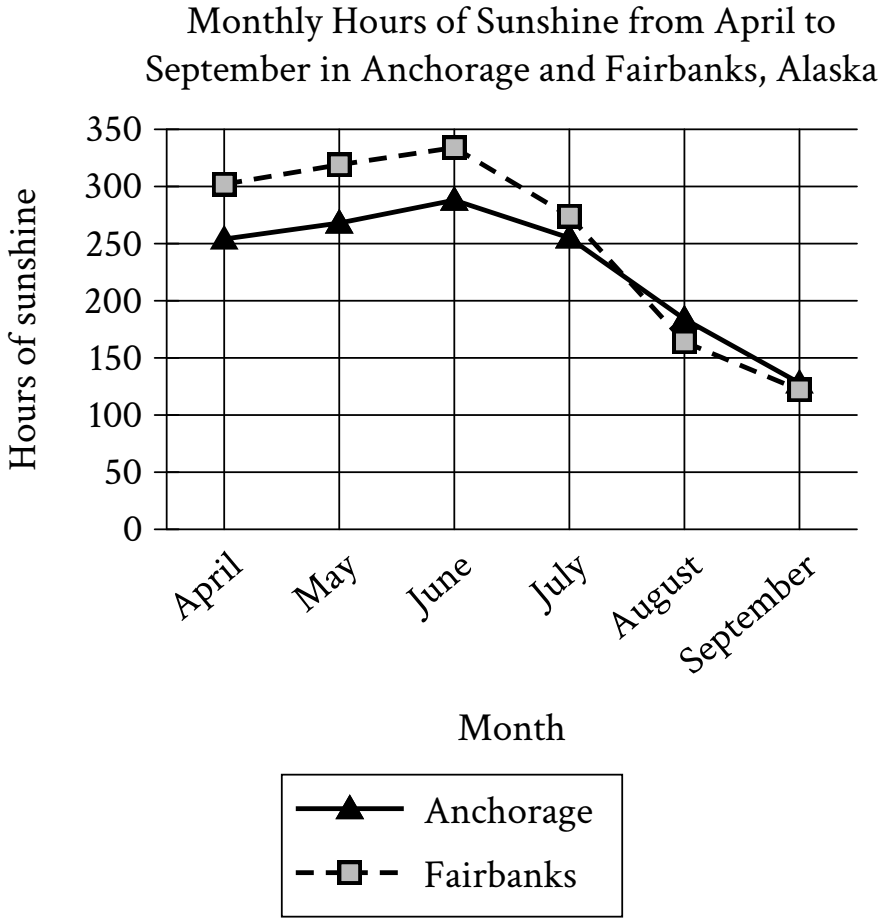
Choice D is incorrect. This choice doesn't support the conclusion. It doesn't include any large newspapers for comparison.

Question Difficulty: Easy

Question ID 0cc3a7b5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 0cc3a7b5



A student is researching monthly hours of sunshine in different cities in Alaska. When comparing trends in Anchorage and Fairbanks, the student concludes that the two cities show a similar pattern in the monthly hours of sunshine from April to September.

Which choice best describes data from the graph that support the student's conclusion?

A. The monthly hours of sunshine in both Anchorage and Fairbanks hold steady in June and July before beginning to decline in August.

B. The monthly hours of sunshine in both Anchorage and Fairbanks increase from April to June and then decrease from June to September.

C. Anchorage and Fairbanks both have less than 200 monthly hours of sunshine from April to September.

D. Anchorage and Fairbanks both have more than 300 monthly hours of sunshine from April to June and less than 200 hours from July to September.

ID: 0cc3a7b5 Answer

Correct Answer: B

Rationale

Choice B is the best answer because it best describes data from the graph that support the student's conclusion about weather patterns in Anchorage and Fairbanks. According to the graph, the amount of sunshine increases in both cities from April to June: in Anchorage, the number of monthly hours increases from about 250 to just under 300, and in Fairbanks the number of monthly hours increases from about 300 to just under 350. Also according to the graph, the amount of sunshine decreases in both cities from June to September: in Anchorage the number of monthly hours decreases from just under 300 to about 125, and in Fairbanks the number of monthly hours decreases from just under 350 to about 125. Thus, the monthly hours of sunshine in both cities follow a similar pattern, increasing from April to June and then decreasing from June to September.

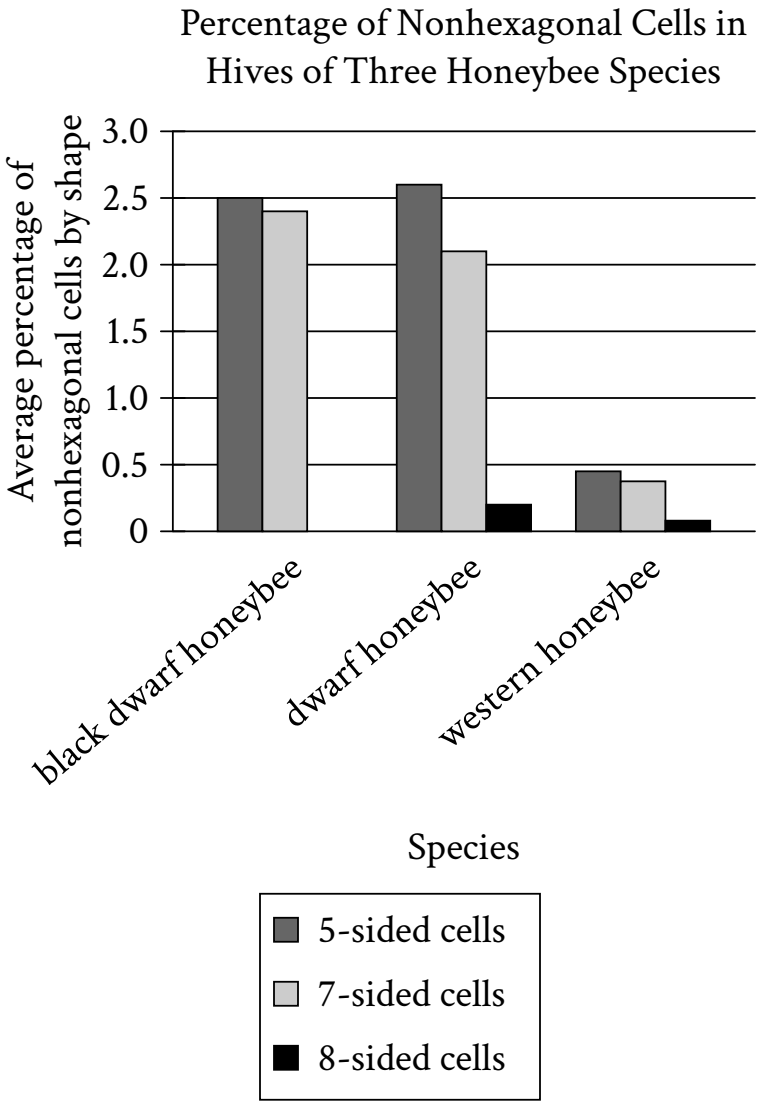
Choice A is incorrect because, according to the graph, the monthly hours of sunshine in both Anchorage and Fairbanks decrease from June to July. They don't hold steady. In June there are slightly less than 300 hours of sunshine in Anchorage and slightly less than 350 hours in Fairbanks. Then, in July there are approximately 250 hours of sunshine in both cities. Choice C is incorrect because the graph shows that Anchorage and Fairbanks have less than 200 monthly hours of sunshine only in August and September. For the rest of the months represented in the graph, both cities have more than 200 monthly hours of sunshine. Choice D is incorrect because, according to the graph, Anchorage doesn't have more than 300 monthly hours of sunshine from April to June. In addition, both cities have more than 200 hours of sunshine in July, although the amount of sunshine does decrease to less than 200 monthly hours in August and September.

Question Difficulty: Medium

Question ID 5b968af0

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: 5b968af0



Honeybee hives consist mainly of hexagonal (six-sided) units called cells, in which queens lay eggs. Hexagonal cells for eggs that develop into nonreproductive workers are smaller than those for eggs that develop into reproductive drones, though the size difference varies by species. Difference in cell size results in a construction problem—it's hard to neatly connect sections of small cells to sections of large cells—that worsens as the difference increases. To fill in gaps between the sections when building a hive, bees rely on cells that have more or fewer than six sides. A student studying beehive structure consults data on three species, concluding that _____

Which choice most effectively uses data from the graph to complete the student's conclusion?

A. cells for worker eggs are probably closer in size to cells for drone eggs in the hives of the western honeybee than in the hives of the dwarf honeybee and the black dwarf honeybee.

B. both the western honeybee and the black dwarf honeybee probably reserve eight-sided cells for drone eggs, while the dwarf honeybee likely deposits drone eggs in seven-sided cells.

C. the western honeybee probably relies on many more geometrical shapes when constructing cells than either the dwarf honeybee or the black dwarf honeybee does.

D. the percentage of hexagonal cells is probably slightly lower in the hives of the western honeybee than in the hives of the dwarf honeybee and the black dwarf honeybee.

ID: 5b968af0 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it most effectively uses data from the graph to complete the student's conclusion about beehive structure. The text explains that in the hives of honeybees, the hexagonal cells housing drone eggs are larger than the hexagonal cells housing worker eggs, and that this size difference results in a construction problem that the bees address by using nonhexagonal cells to fill gaps between sections of drone-egg cells and worker-egg cells. The text also states that the size difference between drone-egg cells and worker-egg cells varies by species of honeybee. The graph displays data on the percentage of nonhexagonal cells in the hives of three species. In the hives of the western honeybee, the percentages of five-sided, seven-sided, and eight-sided cells are all less than 0.5%. But in the hives of the black dwarf honeybee, the percentages of five-sided and seven-sided cells are higher than those for the western honeybee: about 2.5% for both. And for the dwarf honeybee, the percentages of five-sided and seven-sided cells are also higher than those for the western honeybee: slightly over 2.5% and slightly over 2.0%, respectively; additionally, the dwarf honeybee possesses a higher percentage of eight-sided cells than the western honeybee does. Taken altogether, the graph shows that the hives of the western honeybee consist of a smaller percentage of nonhexagonal cells than the hives of the two other species do. Since the nonhexagonal cells exist only to solve the construction problem arising from the difference in size between drone-egg cells and worker-egg cells, a smaller percentage of nonhexagonal cells would be associated with a smaller size difference between the two types of cells. Therefore, it can be concluded from the data that worker-egg cells are probably closer in size to drone-egg cells in the hives of the western honeybee than in the hives of the other two species.

Choice B is incorrect because, as the text states, honeybee species deposit their eggs in hexagonal cells, not in nonhexagonal ones. Thus, the western honeybee and black dwarf honeybee wouldn't deposit drone eggs in eight-sided cells, and the dwarf honeybee wouldn't deposit drone eggs in seven-sided cells. Choice C is incorrect. The text explains that honeybees rely mainly on one geometric shape, the hexagon, when constructing their hives, and the graph shows that the western honeybee relies on the same nonhexagonal shapes as the dwarf honeybee does: five-sided, seven-sided, and eight-sided cells. In other words, the western honeybee and dwarf honeybee rely on the same number of geometric shapes. For the black dwarf honeybee, the graph displays data only for five-sided and seven-sided cells, which suggests a total absence of eight-sided cells. Yet this would be only one less nonhexagonal shape than is seen in the western honeybee. Thus, based on the graph, it would be inaccurate to say that the western honeybee relies on "many more" geometrical shapes than the other two species do. Choice D is incorrect. As the text explains, honeybee hives consist mainly of hexagonal cells, and sections of nonhexagonal cells are used to connect sections of hexagonal cells of different sizes. Since the graph indicates that the percentage of nonhexagonal cells is lower for the western honeybee than it is for the dwarf honeybee or black dwarf honeybee, the western honeybee would conversely have a *higher* percentage of hexagonal cells than the either the dwarf honeybee or black dwarf honeybee does, not a lower percentage.

Question Difficulty: Hard