
Section 2: Writing and Language Test

QUESTION 1

Choice D is the best answer. The prepositional phrase “for example” logically connects the two sentences and correctly indicates that what follows in the second sentence will be examples of household waste products: paper, glass, aluminum, and garbage.

Choices A, B, and C are incorrect because they don’t indicate the true relationship between the two sentences. “Regardless” (choice A) means in spite of something, “however” (choice B) indicates a contrast, and “furthermore” (choice C) means in addition. None of these transitions indicates that an example will follow.

QUESTION 2

Choice B is the best answer. The verb “eliminate” means to remove, and it makes the most sense in the sentence because the object of the verb is “need.” “Eliminating the need” is an idiomatic expression for “removing the need.”

Choices A, C, and D are incorrect. Although all the choices mean “to get rid of,” their connotations are different. “Annihilating” (choice A) is usually used to refer to the act of completely destroying, which is too intense in this context. “Ousting” (choice C) is generally used when referring to the act of forcibly removing a person from a position. “Closing the door on” (choice D) is a colloquial expression that usually means shutting out the possibility of something happening or not being willing to consider an idea. This expression doesn’t fit the tone of the passage and is not idiomatic when used with “need.”

QUESTION 3

Choice C is the best answer. The singular present tense verb “increases” agrees in number with the singular noun “compost” and maintains the parallel structure of the other two compound verbs in the sentence, “minimizes” and “helps.”

Choices A and D are incorrect because the use of the pronoun “it” (choice A) and “also it” (choice D) to begin new independent clauses creates comma splices. Choice B is incorrect because “savings increase” doesn’t maintain the parallel structure of the verbs in the sentence: “minimizes water waste and storm runoff” and “helps reduce erosion.”

QUESTION 4

Choice B is the best answer. When setting off nonessential information, a pair of parentheses needs to be used. This choice provides the initial parenthesis that the parenthesis after “municipality” requires.

Choice A is incorrect because the initial parenthesis is missing and no comma is needed between the noun “quantities” and the modifying information. Choice C is incorrect because the initial parenthesis is missing. Choice D is incorrect because no semicolon is needed before the parenthetical information.

QUESTION 5

Choice D is the best answer. According to the information from the graph, 33 million tons of food waste were discarded in US landfills in 2009, which is consistent with the discussion of food waste in the passage.

Choices A, B, and C are incorrect because the passage thus far has focused on compost. Metal, rubber, leather, and textiles are not materials that are composted.

QUESTION 6

Choice C is the best answer. According to the graph, this is the only choice that makes the sentence true. More food waste was discarded in landfills in 2009 “than any other substance, including plastics or paper.”

Choices A, B, and D are incorrect because they are not true, according to the graph. The graph indicates that less glass, metal, and yard waste were discarded in the landfills than plastics and paper.

QUESTION 7

Choice B is the best answer. No comma is needed between the comparative adjective “worse” and the comparative conjunction “than.”

Choices A, C, and D are incorrect because the word “then” indicates “when” and is not used in comparisons (choices A and C), and no comma is needed after worse (choice D).

QUESTION 8

Choice C is the best answer. The present tense singular verb “contributes” agrees in number with the singular noun “material,” and the present tense verb is consistent with the other present tense verbs in the passage.

Choices A and B are incorrect because “contribute” (choice A) and “are contributing” (choice B) are plural present tense verbs. Choice D is incorrect because “have contributed” is a plural past tense verb.

QUESTION 9

Choice A is the best answer. “Potent” means strong or powerful, which makes sense in the context of discussing greenhouse gas.

Choice B is incorrect because “sturdy” is usually used to refer to the physical strength or solidity of something. Choice C is incorrect because “influential” refers to the power of a person to affect or sway others or events without any apparent effort. Choice D is incorrect because “commanding” indicates that the inanimate greenhouse gas is actually commanding something.

QUESTION 10

Choice C is the best answer. “Armed with these facts” is the most effective transition from the previous paragraph, which discusses the amounts of various substances that end up in landfills and the resulting methane gas that is released from the organic matter. The paragraph that this transition introduces goes on to discuss laws that some cities have instituted to control the handling of compost in landfills to reduce the release of methane gas.

Choices A, B, and D are incorrect because they do not offer transitions that indicate a connection between the problem identified in the previous paragraph—the release of dangerous methane gas from the compost in landfills—and the concluding paragraph that identifies what some cities have done to help alleviate the problem.

QUESTION 11

Choice A is the best answer. No change is needed because the correlative conjunctions “either” and “or” are used together to indicate that one choice or another should be considered. In this sentence, residents are encouraged to choose the option to create their own compost piles or to dispose of compostable materials in bins for collection.

Choices B, C, and D are incorrect because they do not provide the correlating conjunction for “either” used earlier in the sentence.

QUESTION 12

Choice A is the best answer. The sentences are effectively combined by placing a comma after “red” and making the second sentence an appositive that explains the significance of the color red.

Choices B, C, and D are incorrect because they all contain excessive words that add no meaning to the resulting sentence.

QUESTION 13

Choice D is the best answer. Punctuation is not necessary in the underlined portion of the sentence.

Choice A is incorrect because no commas are needed after “festive” and “red” because the adjectives don’t equally modify “banners.” No comma is needed after “banners” because there is no reason to put one between “banners” and “and garlands,” the two objects of the preposition “with.” Choice B is incorrect because placing commas around the prepositional phrase “with festive red banners” wrongly indicates that the information is nonessential and could be eliminated without changing the meaning of the sentence. Choice C is incorrect because there should not be a dash or any other kind of punctuation between “banners” and “and garlands.”

QUESTION 14

Choice C is the best answer. This choice expands on the idea that the lion dance may have originated to ward off an evil spirit and that dressing in a lion costume was part of the effort to scare the spirit away.

Choice A is incorrect because it doesn't make a connection between the fierce quality of a lion and scaring away spirits. Choices B and D are incorrect because the name of the spirit (choice B) and the location of the village where the dance originated (choice D) are not as important as why a lion was incorporated into the dance.

QUESTION 15

Choice C is the best answer. It ties the information about the possible origins and historical purpose of the lion dance to its present purpose as a New Year's celebration of hope.

Choices A, B, and D are incorrect because they don't effectively bring the paragraph to a conclusion. Each of these options is vague and calls for elaboration: choice A lacks specific information, choice B lacks proof for the idea of irrelevance, and choice D lacks a connection to the subject of the paragraph.

QUESTION 16

Choice A is the best answer. The pronoun "both" and prepositional phrase "of whom" refer to "dancers" and are used correctly to introduce a clause that describes how the dancers are hidden by the lion costume. "Whom" is used correctly as the object of the preposition "of."

Choice B is incorrect because the word order doesn't make grammatical sense and the pronoun "which" can't be used to refer to people. Choices C and D are incorrect because they create comma splices.

QUESTION 17

Choice D is the best answer. The pronoun "those" correctly indicates that the moves in dance are being compared to the moves in martial arts. "Those" takes the place of the noun "moves" in the comparison.

Choices A, B, and C are incorrect because they do not compare similar things. "Moves" can't be compared to "martial arts," "acrobatics," "disciplines," "martial artists," or "acrobats."

QUESTION 18

Choice B is the best answer. This choice indicates that the phoenix represents new beginnings, which is consistent in content with the information explaining that the tortoise represents longevity. Additionally, this choice is presented as a parenthetical prepositional phrase beginning with the preposition "for," which is consistent in structure with the parenthetical prepositional phrase "for longevity."

Choice A is incorrect because the parenthetical information indicates what a phoenix is, not what it represents. Furthermore, the information is not presented in a prepositional phrase. Choice C is incorrect because this choice indicates the source of the phoenix, not what it represents. Choice D is incorrect because it is vague and doesn't identify what the phoenix symbolizes.

QUESTION 19

Choice D is the best answer. Sentence 5 most logically should follow sentence 7. The pronoun "their" in sentence 5 refers to the "black lions" (which are the youngest lions and dance quickly) in sentence 7. Sentence 5 indicates that the "older counterparts" to the young lions don't move as quickly.

Choices A, B, and C are incorrect because placing sentence 5 after any other sentence in the paragraph would not be logical and would interrupt the flow of the passage.

QUESTION 20

Choice B is the best answer. The singular possessive pronoun "its" agrees in number with the singular antecedent "dance" and correctly indicates that the "climax" belongs to the dance.

Choice A is incorrect because "it's" is the contraction for "it is" and doesn't make sense in the sentence. Choice C is incorrect because "there" is not a possessive pronoun. Choice D is incorrect because "their" is a plural possessive pronoun that doesn't agree with the singular antecedent "dance."

QUESTION 21

Choice B is the best answer. This choice correctly indicates that the lion is doing the approaching and the snaring, not the teeth.

Choices A and D are incorrect because the teeth don't do the approaching or the snaring; only an animate object can do either. Choice C is incorrect because it is written in the passive voice, which changes the subject of the sentence from "lion" to "envelope." Furthermore, an "envelope" cannot approach a doorway.

QUESTION 22

Choice D is the best answer. The single word "envelope" is concise and clearly refers to the envelope that has been described earlier in the paragraph.

Choices A, B, and C are incorrect because they are wordy and contain information that has been given previously in the paragraph. Additionally, choice A contains inaccurate information because once the money has been chewed up, the envelope is no longer "money-filled."

QUESTION 23

Choice A is the best answer. No change is needed because “scrupulous” fits the formal tone of the passage. “Scrupulous” means exact and conscientious, and it is appropriate when discussing notes taken during a court proceeding.

Choices B and C are incorrect because they are too informal and therefore do not fit the tone of the passage. Choice D is incorrect because “intense” is an adjective that is used to describe something that is done to an extreme degree, such as putting forth effort or performing a physical act.

QUESTION 24

Choice C is the best answer. Commas after “hearings” and “depositions” are correct because they separate the first two items in a series of three.

Choices A, B, and D are incorrect because they all contain semicolons either after “hearings,” “depositions,” or both of the words. Semicolons can be used to separate items in a series that already contains commas, but not to separate individual items in a simple series of words or phrases.

QUESTION 25

Choice C is the best answer. The graph should not be added because it doesn’t support the information in the paragraph. The paragraph describes what a court reporter does. The graph provides information that compares the median salary of court reporters to that of other jobs.

Choices A and B are incorrect because the graph should not be added. It neither supports the claim that court reporting is an important part of a trial nor offers a relevant counterpoint to the argument that the use of digital recorders is on the rise. Choice D is incorrect because it doesn’t matter that there is no information provided in the graph about the pay scale for more experienced court reporters. The paragraph doesn’t deal with the subject of pay, so therefore the graph doesn’t support the paragraph.

QUESTION 26

Choice A is the best answer. No change needs to be made because the word “to” is the idiomatic preposition to connect “subject” with the phrase “human errors” to show that technology such as a digital recorder doesn’t make the same mistakes that people make, such as “mishearing or mistyping.”

Choices B and C are incorrect because the verb “subjected” is a transitive verb that requires a direct object, which is not present in the sentence. Furthermore, “subjected from” is not idiomatic. Choice D is incorrect because “subject for human errors” doesn’t make sense.

QUESTION 27

Choice C is the best answer. The preposition “as” means “functioning in the same way” or “in the capacity of.” The plural noun “record keepers” agrees in number with the plural noun “court reporters.” The sentence indicates that court reporters are functioning as record keepers.

Choices A and D are incorrect because the singular “record keeper” can’t be used to refer to plural “court reporters.” Additionally, in choice D the infinitive verb phrase “to be” can’t be used in place of a preposition. Choice B is incorrect because the word “each” is unnecessary and makes the sentence confusing.

QUESTION 28

Choice C is the best answer. To make the paragraph most logical, sentence 6 should be placed after sentence 3. Sentence 3 explains that the words the recorder types are “instantaneously” available to a judge to view on a computer screen. Sentence 6 explains, by using the transition “however,” that even though words are available instantly, recording technology continues to improve and therefore the need for court reporters is decreasing.

Choices A, B, and D are incorrect because placing sentence 6 after any other sentence would not be logical and would interrupt the flow of the paragraph.

QUESTION 29

Choice B is the best answer. The dash most effectively combines the two sentences. It correctly indicates that what follows is explanatory information. In this case, the information after the dash could be inferred from what has already been stated because the opposite of making fewer mistakes is making more mistakes. The information after the dash in this sentence makes the conclusion overt.

Choice A is incorrect because the word “such” indicates incorrectly that an example of something will follow it. Choices C and D are incorrect because they are wordy and not as succinct as using a dash.

QUESTION 30

Choice B is the best answer. The comma is used correctly to separate the introductory dependent clause from the main independent clause that follows it.

Choice A is incorrect because a semicolon can’t be used to separate a dependent and an independent clause. Choice C is incorrect because a period can’t be used at the end of a dependent clause. Choice D is incorrect because the adverb “therefore” doesn’t make sense in this context; what follows does not result from something said earlier in the sentence.

QUESTION 31

Choice B is the best answer. “In other words” indicates correctly that what follows will be an elaboration of the idea that digital recorders can’t distinguish “important parts of the proceedings from other noises in the courtroom,” “such as a book dropping.”

Choices A, C, and D are incorrect because they don’t show the true relationship between the two sentences. “Despite this” means that in spite of something already said, what follows will be the case. “Therefore” and “consequently” indicate that what follows will be the result of something said earlier. None of these offers a further explanation of what was previously said.

QUESTION 32

Choice D is the best answer. The prepositional phrase “between the words and the extrinsic noises” clearly and concisely identifies what a court reporter is able to distinguish. It is also the only parallel option, using two noun phrases after “between,” which are joined by “and.”

Choice A is incorrect because it needlessly repeats “distinguish between.” Choice B is incorrect because it is not parallel or grammatical. Choice C is incorrect because it is wordy and wrongly suggests that court reporters distinguish between words and a time period (when).

QUESTION 33

Choice D is the best answer. The main idea of the paragraph is that court reporters can distinguish between words and extraneous noises in the courtroom, which digital recorders can’t always do. This choice offers an example of what can go wrong in a courtroom because digital recorders can’t always pick up “indistinct testimony”: the need for retrial because of indistinct testimony from witnesses.

Choices A, B, and C are incorrect because they don’t support the main idea of the paragraph. Making additional announcements at the beginning of a trial (choice A), monitoring to ensure equipment is functioning properly (choice B), and changing roles and duties of several members of the courtroom staff (choice C) are not examples of what can happen as a result of using digital recorders that can’t distinguish words from other courtroom noises.

QUESTION 34

Choice B is the best answer. The adverb “however” indicates that regardless of the conditions that affect “combustion and the resulting fire” on Earth, their behavior in space is different.

Choices A, C, and D are incorrect because they do not show the true relationship between the information that comes before and what follows the linking adverb. “Moreover” means that additional information will follow; “accordingly” means that what follows corresponds to

what has already been said or that what follows is a consequence; and “subsequently” means that what follows happens after what was previously stated. None of these choices indicates the difference between the behaviors of combustion and fire on Earth and in space.

QUESTION 35

Choice D is the best answer. The past tense verb “sought” clearly and concisely conveys the idea that the students were trying to find a method to study combustion of biofuels. Additionally, the word “biofuels” is correctly placed immediately in front of the parenthetical information that defines it to prevent confusion.

Choices A and B are incorrect because they are wordy and the word “biofuel” is not placed immediately in front of the parenthetical information that defines it. Choice C is incorrect because it uses the verb “looked,” which is not preferable to “sought” in this science context.

QUESTION 36

Choice A is the best answer. No change needs to be made because the word “deformation” provides the most precise description of what results when fuel droplets lose their symmetrical form while burning. A droplet that is deformed loses some good attribute due to the influence of some external condition.

Choices B and D are incorrect because “alteration” and “modification” imply that something is changed on purpose. Choice C is incorrect because “transformation” means that one thing is changed into another. None of these choices is accurate when discussing the effect of “gravitational influence” and the “movement of molecules” on droplets of fuel.

QUESTION 37

Choice B is the best answer. The plural verbs “cause” and “limit” agree in number with the plural pronoun “both,” which refers to the plural noun “variations.”

Choices A and C are incorrect because “causes” and “limits” are singular verbs that don’t agree in number with the plural pronoun “both.” Choice D is incorrect because “has caused” and “has limited” are also singular verbs. Additionally, they are present perfect tense verbs that are used to describe a past event that has an influence on the present, which is not the case in this context.

QUESTION 38

Choice D is the best answer. The underlined portion should be deleted because “built for this purpose” repeats the idea of being “specially designed” used previously in the sentence.

Choices A, B, and C are incorrect because they are redundant. There is no reason to repeat the idea of “specially designed.”

QUESTION 39

Choice B is the best answer. This choice offers the most effective transition because it links the previously mentioned problems of conducting the biofuel experiment to the UCSD students' solution: participating in NASA's Microgravity University program.

Choices A, C, and D are incorrect because they don't link the previously identified problems with the specific solution: a program that could help the students overcome too little microgravity time and too small droplets.

QUESTION 40

Choice D is the best answer. The commas after "weightlessness" and "space" are used correctly to set off the nonessential information between them. The information between the commas could be removed and the sentence would still make sense.

Choice A is incorrect because it is missing the comma after "weightlessness." In this context, choices B and C are incorrect because the commas are misplaced. In each of these choices, if the information between the commas were removed, the sentence would not make sense.

QUESTION 41

Choice A is the best answer. The addition should be made because the information specifically identifies an advantage the students gained by working with NASA's Microgravity University program: not traveling to space.

Choice B is incorrect because it isn't accurate. The previous paragraph does suggest that the students didn't actually go into space by stating that researchers fly their experiments aboard aircraft that simulate the microgravity environment. Choices C and D are incorrect because the addition should be made. The addition neither shifts focus away from the students' experiences while on the flight nor restates what has already been said in the sentence.

QUESTION 42

Choice D is the best answer. This choice, "were able to investigate," focuses on what the flights enabled the UCSD students to do that they were not able to do previously using the drop towers. It is consistent with the previous sentence, which states what the flights allowed the students to do.

Choices A, B, and C are incorrect because their focus is on "investigating" and not on allowing or enabling the students to investigate combustion in an environment that provided larger droplets and microgravity similar to that experienced in space.

QUESTION 43

Choice A is the best answer. No change is needed because the larger “spherically symmetric” droplets indicate that the flights remedied the problem of smaller deformed droplets mentioned earlier in the passage.

Choices B, C, and D are incorrect because none of these choices refers to the size or shape of the biofuel droplets, which is what made the investigation of combustion and fire on Earth problematic.

QUESTION 44

Choice C is the best answer. No comma is needed in the underlined phrase, which clearly and concisely expresses the improved techniques for fighting fires in space or at future outposts on the Moon and Mars that may result from better combustion-rate models.

Choices A and B are incorrect because the commas are incorrectly separating the prepositional phrases from the noun “techniques.”

Choice D is incorrect because the pair of commas indicate that the information contained between them is nonessential, which isn’t accurate.

Section 3: Math Test – No Calculator

QUESTION 1

Choice D is correct. Combining like terms on each side of the given equation yields $6x - 5 = 7 + 2x$. Adding 5 to both sides of $6x - 5 = 7 + 2x$ and subtracting $2x$ from both sides yields $4x = 12$. Dividing both sides of $4x = 12$ by 4 yields $x = 3$.

Choices A, B, and C are incorrect because substituting those values into the equation $3x + x + x + x - 3 - 2 = 7 + x + x$ will result in a false statement. For example, in choice B, substituting 1 for x in the equation would give $3(1) + 1 + 1 + 1 - 3 - 2 = 7 + 1 + 1$, which yields the false statement $1 = 9$; therefore, x cannot equal 1.

QUESTION 2

Choice A is correct. The line passes through the origin. Therefore, this is a relationship of the form $d = km$, where k is a constant representing the slope of the graph. To find the value of k , choose a point (m, d) on the graph of the line other than the origin and substitute the values of m and d into the equation. For example, if the point $(2, 4)$ is chosen, then $4 = k(2)$, and $k = 2$. Therefore, the equation of the line is $d = 2m$.

Choice B is incorrect and may result from calculating the slope of the line as the change in time over the change in distance traveled instead of the change in distance traveled over the change in time. Choices C and D are incorrect because each of these equations represents a line with a d -intercept of 2. However, the graph shows a line with a d -intercept of 0.