

REVISING/EDITING PART A

1. (D) The question asks for the most precise revision for the words *talked to some people who did the best in the contest*. Option A and Option C do not precisely state how many people the reporter interviewed. Option B specifies the number of people interviewed but uses the imprecise phrase “who did well.” Option D is the only option that precisely states the reporter’s action (“interviewed”) as well as who exactly the reporter interviewed (“the top three contestants”).

2. (G) The question asks for the identification of a sentence with an inappropriate shift in verb tense. Option E, Option F, and Option H identify sentences that use past tense. Sentence 3 (Option C) demonstrates an incorrect shift into the present tense with the clause “as natural gas becomes more common,” which should be “as natural gas became more common.”

3. (C) The sentence in the box needs a comma to separate items in a series. Option A would remove the necessary comma before the nonrestrictive clause “which is located on Midway Street.” Option B is incorrect because while the phrase that ends with the word “volunteer” can stand on its own as an independent clause, a comma is not needed before the explanation of what the volunteers would help do. Option D would delete a necessary comma between two items in a series. Option C is the only option that would place a necessary comma to separate items “walking dogs” and “cleaning kennels” in the series.

4. (E) The question asks for the best way to combine the sentences to clarify the relationship between the ideas. Option F is incorrect because the conjunction “although” suggests that scientists were allowed to collect data even though there were flyby missions, which is inaccurate. In Option G, the phrase “which have been happening since 1973” is incorrectly modifying “the planet and its moons.” In Option H, the conjunction “but” suggests an adverse relationship between ideas, which is also incorrect. Option E is the only option that accurately reflects the relationship between the ideas by using the nonrestrictive phrase “which allow scientists to collect data about the planet and its moons” to describe the purpose of the flyby missions.

5. (C) The question asks the student to identify a vague pronoun in a sentence in the box. Sentence 1 (Option A) correctly uses the plural pronouns “their”/“they” to refer to both Eliza and Brianna. Sentence 2 (Option B)

uses the pronoun “they” to correctly refer to both girls again. Sentence 4 (Option D) uses the pronoun “they” to correctly refer to “both girls.” Sentence 3 (Option C) is the only sentence where the pronoun is vague. The sentence uses the pronoun “she” near the beginning, but whether “she” refers to Eliza or Brianna is unclear.

6. (E) The sentence in the box needs a comma to separate coordinate adjectives. Option F incorrectly adds a comma between the subject and the verb. Option G incorrectly adds a comma between two adjectives, but they are not coordinate adjectives. Option H is incorrect because a comma is not needed to set off the phrase “to score 100 points in a single game.” Option E is the only option that places a comma where it is needed, between the coordinate adjectives “agile” and “athletic.”

REVISING/EDITING PART B

Unlock, Ride, Return

7. (A) The correct answer must state the topic of the passage and hint at some of the supporting ideas. Option B mentions the idea that bike sharing programs are successful because both residents and tourist can use them, but that detail is mentioned in only the second paragraph. Option C mentions that bike sharing provides a faster mode of transportation, but it is referring to a detail suggested in sentence 16. Option D might seem attractive because it states a specific benefit of bike sharing, but it does not encompass other key points of the passage. Option A is the only option that clearly states the topic of the passage and refers to multiple key points.

8. (F) Because it will be placed after sentence 6, the correct answer needs to provide appropriate details that help the reader understand sentences 5 and 6. Sentences 5 and 6 begin to explain how bike sharing programs work, so the correct answer should provide additional general details that help the reader picture how people use the program. The detail stated in Option E may be true, but the detail relates to where bike sharing stations are located, not to how a bike sharing program works. Similarly, Option H includes details about major United States cities that have bike sharing programs and does not provide more information about how a bike sharing program works. Option G might seem attractive because it provides very specific details about how the bike stations keep bicycles secure. However, this level of detail is too specific to help the reader understand the program as a whole. Only Option F includes details that give the reader a clear idea of how people use bike sharing programs.

9. (D) The correct answer needs to have the same relationship between ideas as the one implied in sentences 8 and 9. Context tells the reader that there is a causal relationship between city bikers' lack of responsibility and their preference for bike sharing. The subordinate clause in Option A, "Although they prefer bike sharing over ownership," presents an opposing idea, giving the impression that city bikers prefer bike sharing even though they are not responsible for storage and maintenance, which is an inaccurate way to connect these ideas. In Option B, the linking word "and" connects the two ideas but does not clarify that one idea is the cause of the other. Option C presents a causal relationship, but it reverses the relationship between the ideas. The use of "since" in Option C suggests that city bikers' preference for bike sharing is the reason they are not responsible for bike storage and maintenance. Only Option D accurately expresses the relationship that the original two sentences implied. The transition word "because" clarifies that avoiding the responsibility for storage and maintenance is the reason city bikers prefer bike sharing.

10. (G) The correct answer should use the most precise and specific details and language. Option E uses an imprecise word, "millions," which does not provide a specific number. Option F specifies "14 million," but it uses the imprecise "huge increase" rather than a specific number. Option H uses the imprecise phrase "several million" rather than the precise number of trips, and it uses the imprecise phrase "big increase" rather than the specific number for the increase. Option G is the only option that includes precise numbers and language.

11. (B) The correct answer must transition from the third paragraph and provide a topic sentence for the fourth paragraph. Option A presents information ("experts increasingly want to discuss") that was not addressed in the passage. Option C might seem attractive because it mentions information from earlier paragraphs about the popularity of bike sharing programs, but it does not accurately preview the fourth paragraph. Option D restates information from the third paragraph but does not relate to the information in the fourth paragraph. Only Option B includes a transition from the previous paragraph and an accurate topic sentence for the fourth paragraph.

12. (G) The correct answer must relate to the topic of the fourth paragraph: the relationship between bike sharing programs and improved air quality in a city. Option E states that improving air quality is the main reason cities establish bike sharing programs, but

this option is incorrect because the paragraph focuses on how improved air quality is an effect of people using bike sharing programs. Option F indicates that participating in a bike sharing program is the principal way travelers can improve air quality, but that does not accurately connect the ideas in the paragraph. Option H suggests that bike sharing programs in some cities are more effective at improving air quality than bike sharing programs in other cities, but this option is incorrect because it does not relate to the main topic of the paragraph: there is a relationship between a city's implementation of a bike sharing program and improved air quality in the city. Option G is correct because it makes a connection between the increasing use of bike sharing programs and the potential impact on air quality.

13. (B) The correct answer must be a sentence that does not relate to the topic of the third paragraph. Option A (sentence 12), Option C (sentence 15), and Option D (sentence 16) are relevant to the paragraph because they provide information about the bike sharing program in New York City. Option B (sentence 13) relates to a program in a city in China, which is not the focus of the third paragraph.

14. (E) The correct answer should provide a logical conclusion based on the details about the transportation and environmental benefits of bike sharing programs. Option F makes a prediction about small- and medium-sized cities that is not supported by the passage, which mentions only large cities. Option G compares bike sharing with other transportation methods, but this option is an incorrect conclusion because the passage focuses on the benefits of bike sharing programs, not comparing bike sharing to other modes of transportation. Option H states that bike sharing is useful for tourists, which does not provide a conclusion for the details about transportation and the environmental impact of bike sharing programs. Only Option E could follow sentence 19 by presenting the conclusion that bike sharing programs will become more routine because of the benefits outlined in the passage.

Pursuing a Hobby

15. (A) The question asks for a sentence that should follow sentence 3 and state the main claim of the passage. Option B suggests that people should think carefully about selecting a hobby to pursue, which may be true, but it is only a minor detail implied in the last paragraph. Option C claims that people should pursue hobbies because hobbies are a productive way to spend

free time. This idea is implied in sentence 18, but it is not the main claim of the passage. Option D addresses the idea that having a hobby should be enjoyable, which is addressed in sentence 1, but this is a general description of hobbies, not the main claim of the passage. Option A is the only option that logically follows the statement in sentence 3 and presents the main claim that people should make time to pursue a hobby because hobbies have a variety of benefits. This claim is developed in sentences 4, 9, 13, and 17.

16. (G) Sentence 5 states the aspects of everyday life that can cause stress. Sentence 6 lists several physical symptoms that can result from stress. Option E incorrectly suggests that sentence 6 is an example of sentence 5. Option F suggests that sentence 6 provides confirmation of the point made in sentence 5, which is incorrect. Option H suggests that sentence 6 is the addition of examples similar to those presented in sentence 5, which is also incorrect. Option G is the only option that provides a transition to show that the symptoms in sentence 6 can happen as a result of the stressors listed in sentence 5.

17. (C) The sentence in the box names some active hobbies and states that these hobbies release endorphins to promote positive feelings and override some effects of stress. Option A places this sentence between sentences 6 and 7, which are both sentences that deal with symptoms of stress and not the hobbies themselves. Option B places the sentence in the box between sentences 7 and 8. Sentence 8 begins a list of some hobbies and how they can give the mind a break from stress. Since the sentence in the box uses the phrase “can also provide,” this sentence needs to go after sentence 8. The sentence in the box would not follow sentence 9 (Option D) because sentence 9 is used to end the discussion of how hobbies relieve stress. Option C states the only place where the ideas in the sentence fit into the paragraph.

18. (F) Sentence 16 uses vague and imprecise language that needs to be more specific (“do something,” “get better,” “go to places”). Only Option F provides specific details about the social activities a hobbyist might do (“enroll in a course,” “attend a convention”). The language used in Option E (“learn more about,” “go to events”), Option G (“try to find new information,” “go to places”), and Option H (“want to expand his or her knowledge,” “do an activity”) does not offer more precision than the original sentence.

19. (A) The question asks for a sentence that follows sentence 17 and supports the ideas in the paragraph: hobbies can encourage positive social interaction. Pursuing a hobby with friends (Option B) may be enjoyable, but this does not explain the benefits of engaging in positive social interaction. Option C states that friends who enjoy one hobby may enjoy other hobbies, but this is not the idea that needs to be supported in sentence 17. Option D addresses the idea that forming relationships becomes more difficult as people grow up, which does not support the ideas in the paragraph. Option A is the only option that provides support for sentence 17 by making the point that having meaningful friendships stemming from interest in a hobby may be associated with a variety of positive outcomes.

20. (H) The question asks for a sentence that is irrelevant to the development of ideas in the third paragraph of the passage. Sentences 10 (Option E), 11 (Option F), and 13 (Option G) are essential to the paragraph in order to explain active leisure and flow. The idea in sentence 14 (Option H) relates to the hobbies of celebrities and businesspeople, which is not relevant to the description and benefits of engaging in active leisure.

READING COMPREHENSION

No Summer

21. (B) The passage is mostly about the strange, cold summer of 1816 and speculation around its cause, which is best stated in Option B. Option A is a detail in the passage about one theory regarding the cause of the weather. Option C is incorrect because the passage is about more than agriculture in New England. Option D is a detail in the passage mentioned only in the first paragraph.

22. (E) The second paragraph states that “farmers prepared to plow and plant” (lines 15–16), they “expected warm temperatures” (lines 16–17), and they were “optimistic” (line 18). This suggests that the farmers kept replanting their crops because they expected the weather to return to normal, which is reflected in Option E. Option F and Option H are incorrect because the cold weather and the snow actually worsened growing conditions. Option G is incorrect because the weather did not improve until the following year.

23. (C) The winter of 1816–1817 followed the meager harvest of the summer of 1816. With many crops “stunted or destroyed” (lines 26–27), one would expect food shortages the following winter, which is Option C. There is no evidence in the passage that people experienced new weather events (Option A) or warmer temperatures (Option B). Although some farmers did replant their crops, there is no evidence in the passage that they struggled to adjust to a different time line for farming (Option D).

24. (H) The phrase “the global nature of weather” refers to how conditions in one part of the world can affect weather in another part of the world, which is Option H. Option E is incorrect because line 70 is about the effects of weather conditions around the world, not about making weather predictions. Option F is incorrect because it discusses the lasting impact on specific geographical areas, while the phrase “the global nature of weather” refers to events that affect the entire world. While weather events, like the unusually cold summer in New England in 1816, can be related to natural disasters such as a volcano eruption, there is no support for the idea that natural disasters tend to occur at the same time, which rules out Option G.

25. (B) The details about the eruption are included in the fourth paragraph. They highlight the severity of the eruption and how it clouded the atmosphere and eventually encircled the world (Option B). The passage does not support the idea that the effects are still present today (Option A) or that other weather events caused the volcano to erupt (Option D). While the details may include information about what happens during an eruption (Option C), that is not why the author includes those details.

26. (H) Researchers today believe that Bessel’s theory is the most logical and probable (lines 67–70). His ideas are summarized in lines 55–57, and Option H restates his theory. Option E and Option F were thought to be other possible causes at the time. Option G was an effect of Mount Pinatubo erupting in 1991.

27. (B) The third paragraph describes how nineteenth-century religious and other leaders tried to account for the cooler weather in 1816. Some leaders thought it was “the end of the world” (line 42), “sunspot activity” (line 44), or a new invention (lines 44–46). This is best stated in Option B. The causes described in the third paragraph were not the most probable cause (Option A), as “the first

plausible explanation”—Bessel’s—is described later in the passage. The ideas described in Option C and Option D are not included in the third paragraph.

Dickens

28. (G) The issues presented in Option E and Option H are only briefly mentioned or hinted at in the passage. Option F states an important detail about Dickens’s childhood, but it is not a main topic. Option G correctly combines the information in the passage about Dickens’s childhood and the novel *David Copperfield*.

29. (A) The author includes the details about Dickens’s experiences as an adult in the fourth paragraph in order to highlight that his time spent in the factory continued to influence him as an adult, as evidenced in lines 43–44 (“As an adult, Dickens always remembered the shame and humiliation”), lines 46–47 (“he could not go near the sites of the factory and boardinghouse”), and lines 49–53 (“Dickens never told his wife and children about his childhood work experience”). This purpose is best stated in Option A. While Dickens was “miserable during the entire four months he spent working at the factory” (lines 26–27) and likely did not want to work in a factory ever again, the author does not include the details in the fourth paragraph to emphasize this idea, ruling out Option B. Option C is incorrect because the detail that Dickens did not share information about his childhood with others is used as a supporting sentence for the idea that childhood experiences affected his adult life. It is also reasonable to infer that Dickens did not want his children to suffer the way that he did, but the details in the fourth paragraph do not emphasize or support this inference, ruling out Option D.

30. (H) Although Dickens disliked his job, there is no reason to think he could not perform his duties (Option E). Option F and Option G might be true, but the details presented in the second and third paragraphs primarily support Option H, the idea that Dickens disliked working in the factory and preferred attending school (“forced to quit school,” “relieved to be out of the factory,” “The father, however, now sided with his son, and the boy was sent back to school”).

31. (B) The correct answer is found in lines 10–13 and in the fifth paragraph. Dickens wrote *David Copperfield* because he was unable to complete his autobiography and writing the novel helped him deal with difficult childhood memories (Option B). Dickens’s writings as an adult would not have helped pay his family’s

debts (Option A). While it may be true that Dickens avoided telling his children about his job at the factory (Option C), that is not the reason Dickens wrote *David Copperfield*. Option D is incorrect because Dickens did not intend to share information about his own experiences.

32. (F) The passage says little about the relationship between Dickens and his mother, only that Dickens felt betrayed when his mother, anxious for the boy's wages, got his job back for him (lines 33–36). Option F best expresses this information. Option E suggests that they did not have a positive relationship, but there is no evidence in the passage to support this inference. Dickens may have hoped his mother would understand why he wanted to go to school (Option G), but this idea is not clearly expressed in the passage. Dickens's mother did negotiate with the factory boss on his behalf (Option H), but this action does not describe their relationship.

33. (D) The passage states, "The father, however, now sided with his son, and the boy was sent back to school" (lines 36–38). In other words, Dickens was able to return to school because his father supported the idea (Option D). The discussion between his mother and his boss (Option A) led to Dickens getting his factory job back. The argument between his father and his boss (Option B) led to Dickens's dismissal from his job, not his return to school. Getting fired from the factory (Option C) occurred before Dickens returned to school but was not the direct reason for it.

Flavors

34. (G) Option E and Option F are too specific: the passage mentions some scientific aspects of taste and smell, but it concentrates on the development of flavors. Option H is mentioned in only the last paragraph. Option G is a good summary of the passage. It incorporates the main topics—the scientific analysis of flavors and how flavors are created.

35. (C) The third paragraph describes a technique for separating a food into its basic chemical constituents. Option C best summarizes the goal of this research. Option A and Option D are not supported by the passage as goals of the research. Option B is incorrect because the goal of the research is to capture and reproduce the flavor, not to develop food.

36. (F) The process of collecting aromas during food preparation is described in the third paragraph. Option E is not supported because the process of capturing aromas has been successful and only certain flavors present difficulties. The idea that most people cannot tell the difference between natural and synthetic flavors (Option G) is not a conclusion that can be made from the collection of aromas during food preparation. Option H is incorrect because aromas are collected during the cooking process to isolate essential chemicals that make up flavor (lines 35–37), not to enhance the natural flavor. Option F is the best answer: the aroma of food as it is being prepared can be captured and distilled to synthesize the food's flavor (lines 35–41).

37. (C) Orange soda is mentioned in lines 52–57 to provide an example of a product that uses a synthetic flavor that some consumers prefer to its natural counterpart (Option C). The idea that consumer preferences for artificial or natural flavors vary could be true, but this is not suggested by the author's discussion of one flavor (orange soda), ruling out Option A. Option B is incorrect because even though the passage states that natural flavors may be more expensive than artificial flavors, the author does not use the details about orange soda to make this point. The author states that some natural flavors may become scarce in the future (lines 59–61), but this is not exemplified by the discussion of orange soda in lines 52–57, ruling out Option D.

38. (F) The author describes the role of the sense of smell to highlight that the aroma of a flavor, in addition to its taste, influences how a person experiences a flavor, as evidenced in lines 10–11 ("The sense of smell has a larger role in tasting flavors than most people realize"). This is best stated in Option F. Option E reflects the idea in lines 8–10, but the idea that it is easier for people to smell an aroma than to taste its flavor is not why the author includes the description about how smell impacts taste. Option G and Option H present inaccurate ideas regarding synthetic flavors and fail to explain why the author describes the role of the sense of smell at the beginning of the passage.

39. (D) The author describes the uses of synthetic flavors in items such as "mouthwashes, toothpastes, beverages" (lines 26–27) to demonstrate that synthetic flavors are found in many everyday household products. This is best stated in Option D. Option A may seem like an attractive option because the list of everyday items with synthetic flavors could give the impression that creating synthetic flavors is easy; however, while some synthetic flavors have

been successfully created (lines 17–20), efforts to duplicate other flavors have been unsuccessful (lines 62–71), ruling out Option A. The idea that the same synthetic flavor is used in many items (Option B) and the idea that synthetic flavors are healthier than natural flavors (Option C) cannot be concluded from the list of common products that use synthetic flavors in lines 26–28.

Great Zimbabwe

40. (G) Only Option C represents the central idea that is developed, supported, and explained throughout the passage. The idea that there was much speculation about Great Zimbabwe is explained in lines 9 and 10 as well as in the second paragraph, and the details about how modern archaeologists determined its origins are explained in the fifth paragraph. Option E is incorrect because it does not encompass the facts revealed about Great Zimbabwe in the fifth paragraph. Option F is incorrect because it mainly focuses on the idea that archaeologists are still interested in the mysteries of Great Zimbabwe, which is mentioned only in the sixth paragraph. Option H is incorrect because the fact that early excavations of Great Zimbabwe caused the destruction of valuable evidence is a detail from lines 50–58, and the option does not fully explain the central idea developed in the passage.

41. (B) Lines 45–47 explain that Mauch “jumped to the conclusion that Great Zimbabwe had been built by the Queen of Sheba.” This affected later investigations of the ruins because archaeologists worked under the assumption that Mauch’s conclusions were accurate, and the archaeologists discarded evidence that may have suggested otherwise, as detailed in lines 50–56. This is best stated in Option B. Archaeologists were interested in the area (Option A), but this was not the main effect of Mauch’s conclusions, as described in the passage. People searched for Great Zimbabwe because they already believed the stories told by Arab traders and historians like de Barro were true (lines 23–26), not because of Mauch’s conclusions, which rules out Option C. Although the city was considered impressive (lines 29–40; lines 69–75), Mauch’s conclusions did not influence whether people believed an ancient culture could have built it, ruling out Option D.

42. (H) The fifth paragraph states that carbon-14 dating proved Randall-MacIver and Caton-Thompson’s conclusions that Great Zimbabwe was built by ancestors of the Shona people during the fourteenth or fifteenth century (lines 64–69). Option E, “when the settlement

was abandoned and why,” has not been solved (lines 77–80). The presence of ivory and gold (Option F) and the reason that Europeans did not discover Great Zimbabwe until the 1870s (Option G) are not presented as mysteries.

43. (B) The Shona people are discussed in the fifth paragraph. Ancient Shona people lived in the African interior, not on the coast, and the passage does not explain where Shona people live in the present, which eliminates Option A. Option C and Option D confuse the histories of the Shona people and ancient Middle Eastern people. Option B is the best answer; lines 64–67 state that Great Zimbabwe was most likely built by ancestors of the present-day Shona people.

44. (H) David Randall-MacIver and Gertrude Caton-Thompson’s conclusions were significant because their excavation of the ruins revealed that Great Zimbabwe was most likely built by the Shona people (lines 64–67) and discredited the long-standing idea that the structure was Middle Eastern in origin. This is stated in Option H. Option E is incorrect because Randall-MacIver and Caton-Thompson’s determined that the city was most likely built in the fourteenth or fifteenth century (line 66), which was later than earlier explorers had assumed. Lines 69–75 indicate that the Shona society was robust (Option G), and lines 77–80 pose the question of why the great city was abandoned (Option F), but these ideas are not the main reasons Randall-MacIver and Caton-Thompson’s conclusions were significant.

45. (A) Option A is correct; the Portuguese searched for “King Solomon’s gold,” which they associated with Great Zimbabwe but they never found the city (lines 23–26). Option B and Option D may be true based on the details in the second paragraph, but they are not the best descriptions of the Portuguese explorers’ overall relationship with Great Zimbabwe. Even though Portuguese explorers had little information about the precise location of Great Zimbabwe (lines 13–16), the passage does not support the idea that the explorers knew they would not find the stone city (Option C).

Bats

46. (E) Option E is correct because it states the main idea of the passage: bats provide benefits for the environment and need to be protected. These benefits are explained and supported in the second and third paragraphs, and the idea that they need to be protected is supported in the fourth and fifth paragraphs. Option

F is incorrect because it focuses on the idea that people consider bats pests and does not explain how bats are helpful. The idea that bats help prevent the spread of disease (Option G) and pollinate rain forest plants (Option H) are details about some of the benefits bats provide, not the central idea of the passage.

47. (D) The far-reaching impact of a keystone species is described in the third paragraph. The flying fox, a keystone species in the rain forest, pollinates plants and distributes seeds and thus helps provide food and shelter for many other plants and animals in its ecosystem. Rain forests in turn help maintain a balanced global atmosphere for living creatures everywhere. Option D best states that bats are important in maintaining a stable ecosystem because of the effects listed in lines 36–43. A keystone species can be threatened with extinction (Option A), but that does not explain the function of a keystone species. Option B and Option C are too limited in scope to represent the function of a keystone species.

48. (G) The author discusses bat conservation at the end of the passage. The author acknowledges that many people think bats are a problem but then stresses that bats should be carefully managed and protected, which is best stated in Option G. Option E is incorrect because the author does not advocate for bats eating crops and cultivated trees. Option F is incorrect because, while bats do support the growth and survival of many species, the author never suggests relocating them to areas with struggling ecosystems as a conservation method. Option H is incorrect because the author understands that farmers and orchard owners need their crops and trees to survive in order to earn a livelihood (lines 62–65).

49. (A) The iroko tree is mentioned in lines 20–23 as a valuable tree that depends entirely on flying foxes for pollination (Option A), and so without bats this plant would not exist. While genetic diversity can improve a plant’s ability to survive, it is not necessary for survival, ruling out Option B. Lines 46–50 explain why bats sometimes eat cultivated fruit, but the result of this is that crops are ruined, ruling out Option C. While bats do eat mosquitoes (lines 9 and 10), this detail best supports the idea that bats help limit the spread of disease, which rules out Option D.

50. (G) The author describes the bat’s role as a keystone species in order to emphasize the drastic effects that a sudden change in the bat population would have on the pollination of plants and trees (lines 36–37), the ability of certain animals to find shelter (lines 37–38), and the levels of oxygen in the atmosphere (lines 40–43). This is best stated in Option G, which encompasses the idea that if bats could not perform these natural activities, the rain forest would be threatened. The ideas in Option E, Option F, and Option H are explained in the third paragraph as natural activities that bats support, but these are individual details about what bats do. The statements do not explain the significance of the role of bats in the survival of an entire rain forest ecosystem.

51. (B) The phrase “ugliness is only skin deep” (line 69) is intended to mean that an unattractive outward appearance does not necessarily indicate inward ugliness. The intended meaning—that the ugly outward appearance of bats does not mean that they are bad—is best stated in Option B. While the passage describes different species of bats (“brown bat” in lines 5 and 8 and “flying foxes” in the second paragraph), the text focuses on their roles in the environment, not on a comparison of their appearance, which rules out Option A. Option C is incorrect; the passage states people try to remove bats because they ruin fruit trees and crops (lines 49–50), not because of their appearance. As mentioned in the fifth paragraph, conservation groups and government agencies are trying to overcome people’s negative perception of bats by educating people about the benefits bats provide; however, Option D is incorrect because the passage does not state or imply that the physical appearance of bats influences efforts to conserve them.

Samizdat

52. (G) Option E mentions two important samizdat writers from the fourth paragraph but does not explain samizdat or the authors’ relationship to it. Option F refers to all poetry published in the Soviet Union, not just samizdat poetry, so it is too broad. Option H is mentioned only in the first paragraph. Option G is a good description of the topic of the passage, describing Soviet censorship and the samizdat response.

53. (B) The earliest phase of samizdat is described in lines 33 and 34: “At first, samizdat focused mainly on literature, such as poetry and novels.” Only Option B, “a short story,” fits in this category. Option A, Option C, and Option D are not representative of the earliest phase of samizdat.

54. (E) The phrase “a knock at his door in the middle of the night” refers to the secret police. Pasternak, like other samizdat writers, feared being caught by authorities and accused of writing and distributing samizdat (lines 15–18). Option E is correct. The passage does not indicate that Pasternak would be concerned about “a representative from a major publisher” (Option F), “a participant in the samizdat network” (Option G), or “people from other countries” (Option H) knocking on his door at night.

55. (D) Option D is the best answer because storing and circulating texts via computers marked a significant change from hand-copying or typing paper copies of samizdat texts (lines 64–68). Option A, Option B, and Option C represent events that occurred during the peak of samizdat circulation, but those events did not directly lead to significant changes in the samizdat distribution process.

56. (F) Lines 1–3 indicate that people could be punished for writing about certain topics. Lines 26–32 explain the steps samizdat authors and distributors used to ensure that the network of authors was protected, including having authors leave their work unsigned or using fake names. This is stated in Option F. Samizdat works, like Pasternak’s *Doctor Zhivago*, were smuggled out of the country (lines 46–48), so using no names or fake names would not relate to this practice, ruling out Option E. Samizdat writers would be breaking censorship law regardless of whether they included their real names, which rules out Option G. While making copies of a work was part of the samizdat distribution process, the act of leaving work unsigned or writing under a false name would not differentiate between original and copied works, which rules out Option H.

57. (A) The answer is found in lines 68–73. The correct answer, Option A, makes the connection between the abolishment of censorship and subsequent freedom of the press, which eliminated the need for samizdat. The fifth paragraph explains that there was “a publishing boom” (lines 70–71) after censorship laws were abolished but does not suggest that samizdat networks ended because they became regular publishing companies, which rules out Option B. Option C is incorrect because the use of computers helped samizdat networks spread material (lines 65–68) while censorship laws were still in place. Option D is incorrect because going deeper underground would not be necessary after censorship was abolished.

- 58. (162)** First, find the measure of angle PQR.
 The measure of angle PQR is equal to the measure of angle PSR.

$$m\angle PSR = 180 - 72 = 108.$$

So, the measure of angle PQR is also 108.

$$108 + 90 + x = 360$$

$$198 + x = 360$$

$$x = 162$$

- 59. (99)** Let x be the number of oak trees when 264 pine trees are planted. Set up a proportion and solve for x :

$$\frac{x}{264} = \frac{3}{8}$$

$$8x = 762$$

$$x = 99$$

- 60. (-4)** $4w = 2w - 8$

$$2w = -8$$

$$w = -4$$

- 61. (45)** Let x = number of students with only cats as pets.

Let y = number of students with only dogs as pets.

Calculate x and y using the given information:

There are 20 students who have cats, and of those 20 students, 3 have both cats and dogs. Thus, $x = 20 - 3 = 17$. There are 23 students who have dogs, and of those 23 students, 3 have both cats and dogs. Thus $y = 23 - 3 = 20$.

To find the total number of students surveyed, add the number of students who only have cats (x), the number of students who only have dogs (y), the number of students who have both (3), and the number of students who have neither (5):
 $3 + 5 + x + y = 8 + 17 + 20 = 45$

- 62. (63)** If x is the smaller consecutive integer, then $x + 1$ is the larger consecutive integer. Use their sum (-15) to find x :

$$x + (x + 1) = -15$$

$$2x + 1 = -15$$

$$2x = -16$$

$$x = -8$$

The two consecutive integers are -8 and -7 .

One is added to the smaller integer:

$-8 + 1 = -7$, and 2 is subtracted from the larger integer: $-7 - 2 = -9$.

Find the product: $-7 \times -9 = 63$.

- 63. (B)** $2k = m + 3$ so $k = \frac{m+3}{2}$.

Substitute each value of m to find the values of k :

$$k = \frac{5+3}{2} = \frac{8}{2} = 4$$

$$k = \frac{7+3}{2} = \frac{10}{2} = 5$$

$$k = \frac{9+3}{2} = \frac{12}{2} = 6$$

The set k is $\{4, 5, 6\}$.

- 64. (E)** First, convert 500 milliliters to liters by dividing by 1,000: $500 \div 1,000 = 0.500$

Now, multiply by 24 to find the solution:

$$0.500 \times 24 = 12\text{L}$$

- 65. (A)** The sum of Adrianna's course grades equals 4 times the average (mean) of her grades: $90 \times 4 = 360$. Roberto has the same sum (360) as Adrianna. Find the mean of his course grades:

$$360 \div 5 = 72$$

66. (H) Set up some equations.

Jenny (J) has twice as many marbles as Keiko (K): $J = 2K$

Jenny gives Keiko 5 marbles, so now they each have: $J - 5$ and $K + 5$ marbles.

Jenny still has 10 more than Keiko:

$$J - 5 = (K + 5) + 10$$

To find how many marbles Jenny had to start with, solve $J = 2K$ for K and substitute that into the second equation:

In equation $J = 2K$, solve for K : $K = \frac{J}{2}$.

Substitute $\frac{J}{2}$ in for K .

$$J - 5 = (K + 5) + 10$$

$$J - 5 = \left(\frac{J}{2} + 5\right) + 10$$

$$J - 5 = \frac{J}{2} + 15$$

$$J = \frac{J}{2} + 20$$

$$\frac{J}{2} = 20$$

$$J = 40 \text{ marbles}$$

67. (A) Let x be the number of inches representing 1 foot. Set up a proportion and solve for x :

$$\frac{x}{1} = \frac{0.125}{125}$$

$$x = 0.001 \text{ in.}$$

68. (G) First, add the percentage of cars containing 3 people, 4 people, and 5 or more people:

$$15\% + 7\% + 3\% = 25\%$$

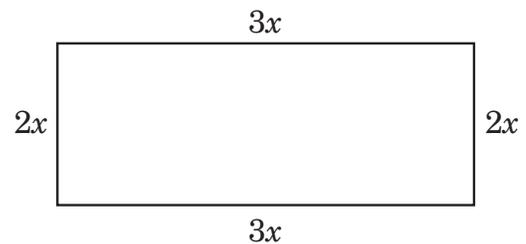
Thus, 25% of the cars contained **at least** 3 people, so use that to calculate the number of cars:

$$420 \times 0.25 = 105 \text{ cars.}$$

69. (B) Line segment \overline{RS} is the altitude, or height, of triangle QRP. The length of QP is 8 cm. Use that information to find the area of triangle QRP: $A = \frac{1}{2}bh = \frac{1}{2}(8)(6) = 24 \text{ sq cm.}$

There are 4 congruent triangles in the pyramid, so the surface area is $4 \times 24 = 96 \text{ sq cm.}$

70. (F) Let $2x =$ the width and $3x =$ the length. Draw the rectangle to help visualize.



Since 2 times width + 2 times length = perimeter, we get

$$2(2x) + 2(3x) = 510$$

$$4x + 6x = 510$$

$$10x = 510$$

$$x = 51$$

$$2x = 102 \text{ cm and } 3x = 153 \text{ cm}$$

71. (D) Multiply each term by 2 to eliminate the fraction, and isolate x :

$$-4(2) < \left(\frac{x}{2}\right)(2) < 2(2)$$

$$-8 < x < 4$$

Therefore, x must be between -8 and 4 .

72. (F) Use proportions to make the conversions:

Lorgs to dollars:

$$\frac{140}{x} = \frac{7}{1}$$

$$7x = 140$$

$$x = \$20$$

Dalts to dollars:

$$\frac{16}{x} = \frac{0.5}{1}$$

$$0.5x = 16$$

$$x = \$32$$

Total dollars = 20 + 32 = \$52

73. (B) Let x be the total number of colored pencils in the box. Set up a proportion to find x :

$$\frac{2}{7} = \frac{6}{x}$$

$$2x = 42$$

$$x = 21$$

If there are 6 red pencils, then the number of pencils that are not red is $21 - 6 = 15$.

74. (H) Since both ratios have y in common, solve for x and z in terms of y in both equations.

Using $x:y = 1:4$, solve for x in terms of y .

$$\frac{x}{y} = \frac{1}{4}$$

$$x = \frac{1}{4}y$$

Using the ratio $y:z = 4:5$, solve for z in terms of y :

$$\frac{y}{z} = \frac{4}{5}$$

$$z = \frac{5}{4}y$$

The question states $x + y + z = 50$.

Substitute from the two equations above and solve for y .

$$\frac{1}{4}y + y + \frac{5}{4}y = 50$$

$$\frac{10}{4}y = 50$$

$$10y = 200$$

$$y = 20$$

75. (B) The shaded region is a right triangle. Each leg is 1 unit in length. So the area is

$$A = \frac{1}{2}bh = \frac{1}{2}(1)(1) = \frac{1}{2} \text{ or } 0.5 \text{ sq unit}$$

76. (F) Create a table with the information provided in the problem and use subtraction to fill in the rest of the table:

	Female	Male	TOTAL
Commutes to work	21%	39% (60 - 21)	60%
Does not commute to work	24% (45 - 21)	16% (40 - 24)	40% (100 - 60)
TOTAL	45%		100%

16% of the population is male and does not commute to work.

- 77. (A)** Let x be the price per pound for the meat. Set up an equation to show what Mrs. Cranston spent:

$$5(0.90) + 8x = 26.90$$

$$4.50 + 8x = 26.90$$

$$8x = 22.40$$

$$x = 2.80$$

The price per pound for the meat is \$2.80.

- 78. (E)** The probability that both cards are not blue is the same as the probability that both cards **are** red. There are 4 red cards out of the 10, so the probability of the first card being red is $\frac{4}{10}$. Now there are 9 cards left, and 3 of those are red, so the probability of the second card being red is $\frac{3}{9}$. Multiply the two probabilities to find the probability that both cards are red (not blue):

$$\frac{4}{10} \times \frac{3}{9} = \frac{12}{90} = \frac{2}{15}$$

- 79. (D)** 1 sind = 4 lorgs, so 1 sind > 1 lorg.
 2 harps = 5 sinds, so 1 harp > 1 sind.
 1 plunk = 3 harps, so 1 plunk > 1 harp, meaning that 1 plunk > 1 sind and 1 lorg.
 2 plunks = 5 dalts, so 1 plunk > 1 dalt.
 Therefore, the plunk is the most valuable.

- 80. (G)** For each row, multiply the number of students by the score. Then add those together and divide by the total number of students to find the mean (average) of the 10 students.

$$\frac{85(4)+75(4)+65(2)}{10} = \frac{340+300+130}{10}$$

$$= \frac{770}{10} = 77$$

- 81. (B)** According to the chart, 22% of people walk to work and 4% ride a bicycle. Subtract to find the percentage of how many more people walk than bicycle:

$$22\% - 4\% = 18\%$$

To find the exact number of people, multiply 18% (0.18) by the number of people working in Center City (15,000):

$$15,000 \times 0.18 = 2,700$$

- 82. (F)** To find the smallest factor of 91, list the factors: 1, 7, 13, and 91.

The smallest factor (other than 1) is 7.

Of the options listed (30, 35, 39, and 44), only 35 is a multiple of 7.

- 83. (D)** Let x be the remaining side of the actual banner. Set up a proportion:

$$\frac{x}{16} = \frac{36}{12}$$

$$x = 48 \text{ ft}$$

- 84. (F)** Let x be the number of second-, third-, and fourth-year students. Then the total number of students in the college is $663 + x$. Set up a proportion and solve for x :

$$\frac{15}{1} = \frac{663+x}{179}$$

$$663 + x = 179(15)$$

$$663 + x = 2,685$$

$$x = 2,022$$

- 85. (D)** $2\frac{1}{5} + 3\frac{3}{10} + 4\frac{2}{5} + 5\frac{1}{2}$

Convert all the fractions to a common denominator (10):

$$2\frac{2}{10} + 3\frac{3}{10} + 4\frac{4}{10} + 5\frac{5}{10}$$

$$= (2 + 3 + 4 + 5) + \left(\frac{2+3+4+5}{10}\right)$$

$$= 14 + 1\frac{4}{10} = 15\frac{2}{5}$$

- 86. (F)** Divide the rate by the number of seconds in an hour. (Since there are 60 minutes in an hour and 60 seconds in a minute, multiply $60 \times 60 = 3,600$ seconds in an hour):

$$\frac{55}{3,600} \text{ miles per second}$$

Multiply by the number of feet in a mile (5,280):

$$\frac{55 \cdot 5,280}{3,600} \text{ feet per second}$$

- 87. (D)** First, set up an equation to express Tien’s age (T) and Jordan’s age (J) today:

$$T = \frac{1}{4}J$$

Two years from now, Tien’s age will be $T + 2$, and Jordan’s age will be $J + 2$. Set up an equation about the relationship between Tien’s age and Jordan’s age in two years:

$$T + 2 = \frac{1}{3}(J + 2)$$

Solve the above equation for T :

$$T = \frac{1}{3}(J + 2) - 2$$

Now set the two equations equal to each other and solve for J :

$$\frac{1}{4}J = \frac{1}{3}(J + 2) - 2$$

$$\frac{1}{4}J = \frac{1}{3}J - \frac{4}{3}$$

$$-\frac{1}{12}J = -\frac{4}{3}$$

$$J = -\frac{4}{3}\left(-\frac{12}{1}\right)$$

$$J = 16$$

- 88. (E)** List the factors of 48:

1 and 48, 2 and 24, 3 and 16, 4 and 12, 6 and 8

There are no factors greater than 24 and less than 48.

- 89. (C)** The first integer is l , so the second is $l + 1$, the third is $l + 2$, then $l + 3$, and finally $l + 4$. Since g is the fifth and greatest of the integers, $g = l + 4$.

Substitute $l + 4$ for g and simplify:

$$\frac{l+g}{2} = \frac{l+l+4}{2} = \frac{2l+4}{2} = l + 2$$

- 90. (H)** Three years is 36 months (12×3). Set up an expression to find the total amount Johan paid:

$$1,000 + 300(36) = \$11,800$$

- 91. (B)** Create a list of the possible pairs. Let the cookies be named A, B, C, D, E, and F.

AB, AC, AD, AE, AF
BC, BD, BE, BF
CD, CE, CF
DE, DF
EF

There are a total of 15 possible pairs of cookies that Aiden can choose.

- 92. (G)** Set up proportions to figure out how many slides Deion and Kyra can create in 1 hour:

Deion

$$\frac{5}{20} = \frac{x}{60}$$

$$20x = 300$$

$$x = 15$$

Deion can create 15 slides in 1 hour.

Kyra

$$\frac{3}{10} = \frac{x}{60}$$

$$10x = 180$$

$$x = 18$$

Kyra can create 18 slides in 1 hour.

Add Deion and Kyra to figure out how many slides they can create together in 1 hour:

$$15 + 18 = 33.$$

93. (C) Since $LN = \frac{1}{8}$, point N is located at $4\frac{5}{16} + \frac{1}{8} = 4\frac{7}{16}$. So M must be between point L, $4\frac{5}{16}$, and point N, $4\frac{7}{16}$. Point L can also be written as 4.3125, and point N can be written as 4.4375. The only option given that lies between those two points is 4.35.

94. (G) The length of the stick must be the greatest common factor of 72 and 30. The factors of 30 are 1, 2, 3, 5, 6, 10, 15, and 30. Of those, only 1, 2, 3, and 6 are also factors of 72. The greatest of these is 6.

95. (B) Ryan has 130 pages left to read ($150 - 20$). He read 20 pages in 30 minutes, which means he read at a rate of 40 pages per 1 hour. To find out how much longer it will take him to finish the assignment, divide the total number of pages remaining (130) by the number of pages he is able to read per hour (40):

$$\frac{130}{40} = 3\frac{1}{4}$$

96. (G) It is easier to rewrite $\frac{M}{N}$ as $M \div N$ since they are both fractions.

$$M \div N = \frac{w}{x} \div \frac{y}{z} = \frac{w}{x} \cdot \frac{z}{y} = \frac{wz}{xy}$$

97. (B) The question asks for integers from 12 to 30 that are not divisible by 2 or 3.

The set of consecutive integers is {12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30}.

Since all even numbers are divisible by 2, eliminate all even numbers, leaving the odd numbers in the set: {13, 15, 17, 19, 21, 23, 25, 27, 29}.

Eliminate those integers that are multiples of 3 (15, 21, and 27). The remaining integers are: {13, 17, 19, 23, 25, 29}. Therefore, there are 6 numbers in the set that are multiples of **neither** 2 nor 3.

98. (G) Take each city's number of schools and multiply by the number of students. It is not necessary to calculate all 5 of these. Cities M and N have the same number of students, so just calculate the number of students in City M because it has more schools than City N. The same goes for Q and R — only Q needs to be calculated because it has more schools than R.

$$M = 8 \times 500 = 4,000$$

$$P = 9 \times 400 = 3,600$$

$$Q = 6 \times 700 = 4,200$$

City Q has the greatest number of students.

99. (C) The total number of candies in the box is $5 + 3 + 2 = 10$. The number of candies that are not banana is $5 + 2 = 7$.

The probability of the first candy not being banana is $\frac{7}{10}$. Now, out of 9 candies, there are 6 candies left that are not banana.

The probability of the second candy not being banana is $\frac{6}{9}$. Multiply these two probabilities to get the solution:

$$\frac{7}{10} \times \frac{6}{9} = \frac{42}{90} = \frac{7}{15}$$

100. (H) Solve the equation for z :

$$\frac{w}{x} = \frac{y}{z}$$

$$wz = xy$$

$$z = \frac{xy}{w}$$

101. (C) Convert the ratios into fractions of WZ. Use the sum of the ratios for the denominator.

$$WX:XY:YZ = 4:2:3$$

$$WX = \frac{4}{4+2+3} = \frac{4}{9}$$

$$XY = \frac{2}{4+2+3} = \frac{2}{9}$$

The part of WZ that is WY is the sum of those fractions:

$$WY = \frac{4}{9} + \frac{2}{9} = \frac{6}{9} = \frac{2}{3}$$

Find the length of WZ: $WZ = 8 - (-10) = 18$

The value of WY is $\frac{2}{3}(18) = 12$.

102. (G) Find 1% of 0.02: $0.02 \times \frac{1}{100} = 0.0002$

The greatest allowable thickness would be $0.02 + 0.0002 = 0.0202$ inch.

103. (D) First, calculate the highest score for each section by adding the lowest score to the range:

$$\text{Section I: } 65 + 28 = 93$$

$$\text{Section II: } 62 + 25 = 87$$

$$\text{Section III: } 67 + 22 = 89$$

The overall highest score is 93, and the overall lowest score is 62. Thus the overall range is $93 - 62 = 31$.

104. (F) Since $3n$ is even, then $3n + 1$ must be odd. Thus $3n + 3$ and $3n + 5$ are also odd. So there are a total of 3 numbers in this range that are odd.

105. (D) There are 6 digits in the repeating decimal (769230), so 7 would be the first, seventh, thirteenth digit and so on. To find the 391st digit, divide 391 by 6.

$$391 \div 6 = 65 \text{ R}1$$

Since the remainder is 1, that means the 391st digit is the same as the 1st digit, which is 7.

106. (E) One revolution is equal to the circumference of the tire:

$$C = 2\pi r = 2(1)\left(\frac{22}{7}\right) = \frac{44}{7} \text{ ft}$$

The car travels at 4,400 ft per minute. To calculate the number of revolutions, divide the speed by the circumference:

$$4,400 \div \frac{44}{7} = 4,400 \times \frac{7}{44} = 700 \text{ revolutions.}$$

107. (D) $100(2 + 0.1)^2 - 100 = 100(2.1^2) - 100$
 $= 100(4.41) - 100 = 441 - 100 = 341$

108. (G) The total number of handballs in the container is $4 + 5 + 8 + 9 + 11 = 37$.

Since there are 8 yellow handballs, the probability of selecting a yellow handball is $\frac{8}{37}$.

109. (A) Each chair costs Leon \$150 to make, and he sells the chair for \$275. His profit is found by subtracting the cost from the price:

$$\$275 - \$150 = \$125 \text{ per chair}$$

If Leon makes and sells 25 chairs in a week, his initial profit is $25 \times \$125 = \$3,125$. However, Leon has additional fixed expenses of \$1,250 per week, so this cost must also be subtracted to arrive at the profit. His final profit is $\$3,125 - \$1,250 = \$1,875$.

110. (H) Convert 4 ft 7 in. to inches.

Since 12 in. = 1 ft :

$$4(12) + 7 = 55 \text{ inches}$$

Multiply that by the conversion

$$254 \text{ cm} = 1 \text{ in.}$$

$$55 \times 2.54 = 139.70 \text{ cm}$$

111. (C) First, use $JK = 3\frac{1}{2}$ to find the location of J:

$$\frac{3}{8} - J = 3\frac{1}{2}$$

$$J = \frac{3}{8} - 3\frac{1}{2} = -3\frac{1}{8}$$

Now, use $JM = 9\frac{3}{4}$ to find the location of M:

$$M - \left(-3\frac{1}{8}\right) = 9\frac{3}{4}$$

$$M + 3\frac{1}{8} = 9\frac{3}{4}$$

$$M = 9\frac{3}{4} - 3\frac{1}{8} = 6\frac{5}{8}$$

Finally, use $LM = 1\frac{1}{8}$ to find the location of L:

$$6\frac{5}{8} - L = 1\frac{1}{8}$$

$$L = 6\frac{5}{8} - 1\frac{1}{8} = 5\frac{4}{8} = 5\frac{1}{2}$$

112. (G) $4x - 3y = 12$

$$4x = 3y + 12$$

$$x = \frac{3}{4}y + \frac{12}{4}$$

$$x = \frac{3}{4}y + 3$$

113. (A) First, determine the total number of servings of fruits and vegetables that the students ate by multiplying the number of servings by the number of students in each row of the table. Then add that column to get the total number of servings:

Number of Servings of Fruits and Vegetables	Number of Students	Number of Servings × Number of Students
0	5	0
1	7	7
2	3	6
3	4	12
4	0	0
5	1	5

Total: 30

Calculate the mean by dividing the total number of servings of fruits and vegetables by the total number of students:

$$\frac{30}{20} = 1\frac{1}{2}$$

114. (G) The ratio is 4:3:2:1, so the total parts is 10.

Since there are two parts resin, the fraction of resin is $\frac{2}{10} = \frac{1}{5}$.

So the amount of resin in 30 lb of paste (for 1 billboard) is $\frac{1}{5} \times 30 = 6$ lb. For 4 billboards, that would be $6 \times 4 = 24$ lb.

Answer Key for Sample Form A

1. D	14. E	27. B	40. G	53. B	66. H	79. D	92. G	105. D
2. G	15. A	28. G	41. B	54. E	67. A	80. G	93. C	106. E
3. C	16. G	29. A	42. H	55. D	68. G	81. B	94. G	107. D
4. E	17. C	30. H	43. B	56. F	69. B	82. F	95. B	108. G
5. C	18. F	31. B	44. H	57. A	70. F	83. D	96. G	109. A
6. E	19. A	32. F	45. A	58. 162	71. D	84. F	97. B	110. H
7. A	20. H	33. D	46. E	59. 99	72. F	85. D	98. G	111. C
8. F	21. B	34. G	47. D	60. -4	73. B	86. F	99. C	112. G
9. D	22. E	35. C	48. G	61. 45	74. H	87. D	100. H	113. A
10. G	23. C	36. F	49. A	62. 63	75. B	88. E	101. C	114. G
11. B	24. H	37. C	50. G	63. B	76. F	89. C	102. G	
12. G	25. B	38. F	51. B	64. E	77. A	90. H	103. D	
13. B	26. H	39. D	52. G	65. A	78. E	91. B	104. F	