

Test

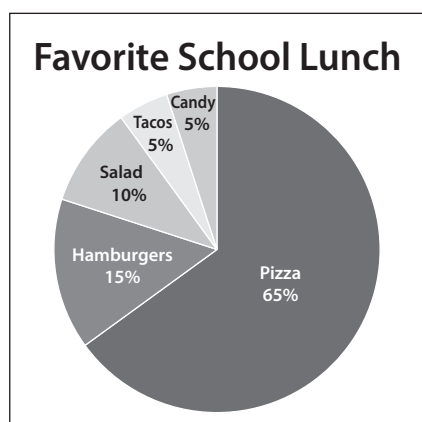
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WRITING

Writing Instructions

- Choose either Task 1 (Article/Proposal) or Task 2 (Essay). Write on only ONE of these tasks.
- Once you have chosen your task, darken the circle for "Article/Proposal" or "Essay" on your writing answer document.
- You will have 45 minutes to write your answer.
- Use #2 (soft) pencil only.
- Use only the lines provided on the writing answer document to complete this section. You should write about two pages.
- Do not write your answer in this booklet.
- You will not be graded on the appearance of your paper, but your handwriting must be readable.
- You may use the planning area provided in this booklet, but it will not count toward your score.

Writing Prompt



31 million students participate in the National School Lunch Program each year.

- a government report

"My kid won't eat his school lunch. He doesn't like it."

- Daisy Kates,
Parent

Task 1: Article

To promote student health, the government has issued new guidelines limiting salt, sugar, and fat in school lunches. Some people feel this makes meals less flavorful and less enjoyable for students. Write an **article** for a local news website explaining the impact of the new guidelines and your opinion. Include at least one piece of information given above to support your response.

Task 2: Essay

Some people feel schools have a responsibility to encourage children to eat healthy food. Others think it is the parent's responsibility. Write an **essay** addressing this issue and explain your opinion about it. Include at least one piece of information given above to support your response.

Remember

Once you have chosen your task, darken the circle for "Article/Proposal" or "Essay" on your writing answer document.

LISTENING

Listening Section Instructions

This section of the test has three parts. Mark all your answers on the separate answer sheet. Do not make any stray marks on the answer sheet. If you change your mind about an answer, erase your first answer completely. If you do not know the answer, you may guess. Try to answer as many questions as possible.

Part 1

In this part, you will hear 20 short conversations. After each conversation, you will hear a question about it. You will hear each conversation and question once. The answer choices are printed in the test booklet. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B, C, or D.

Do you have any questions?

-
- | | |
|--|--|
| 1. What is happening?
A. The network is having connection problems.
B. The woman wants the man to log off the Internet.
C. The man has a suggestion to solve the woman's problem.
D. The woman is the only person experiencing technical issues. | 5. What does the woman describe?
A. the reasons for a fashion trend
B. a new line of cosmetic products
C. the benefits of not using makeup
D. a method of taking care of one's skin |
| 2. What does the man want the woman to do?
A. finish her talk
B. speak more clearly
C. postpone her presentation
D. slow down when she speaks | 6. What is the man doing?
A. planning to surprise Julia
B. making changes to an event
C. planning a vacation overseas
D. inviting the woman to a party |
| 3. What does the man want to do?
A. move closer to the university
B. pay less money to go to school
C. get the university to change a rule
D. attend university in a different state | 7. What does the man do?
A. clarify the meaning of a term
B. describe the benefits of his major
C. correct the woman's misunderstanding
D. explain why he chose the subject he is studying |
| 4. What do the speakers imply?
A. They disagree with the actions of their classmates.
B. They approve of how a teacher handled an incident.
C. They were upset by something that happened in class.
D. They thought their teacher should have behaved differently. | 8. What does the woman imply about the film?
A. It ran a little too long.
B. The man should see it.
C. It demands serious attention.
D. She disagrees with what he heard about it. |
| | 9. What does the man imply about the woman?
A. Her medicine has no risk of side effects.
B. She should avoid overusing the medicine.
C. The medicine she used previously did not work.
D. She should call him if the medicine fails to control her symptoms. |

LISTENING

10. What does the woman imply about Charlie?
- A. She is not certain if he will pass the class.
 - B. She thinks he needs more help than he is receiving.
 - C. She believes he should continue to work with a tutor.
 - D. She is not concerned about his academic performance.
11. What do the speakers imply?
- A. They are planning to go to Brazil to conduct research.
 - B. Journals from Brazil are publishing high-quality research.
 - C. The number of research papers from Brazil is a sign of quality.
 - D. They want academic journals to publish more Brazilian research.
12. What is happening?
- A. The cash register is malfunctioning.
 - B. The man needs to pick up some supplies.
 - C. The woman is being trained to use the cash register.
 - D. The man needs to handle a problem in the back room.
13. Why does the woman mention chocolate?
- A. to identify a food she enjoys eating
 - B. to describe a food she believes is unhealthy
 - C. to explain what she does to take care of her health
 - D. to mention a food she does not particularly care for
14. What will the man probably do?
- A. take the less expensive flight
 - B. try to avoid a stopover in Dallas
 - C. spend the night near the airport
 - D. take the flight that leaves earlier
15. What is the main topic of the speakers' conversation?
- A. personal tastes in music
 - B. where to hear live music
 - C. how to entertain a visitor
 - D. the cost of hearing music live
16. What are the speakers discussing?
- A. an advertisement
 - B. recent fashion designs
 - C. the design of a website
 - D. the arrangement of products in a store
17. What does the woman find impressive about the man?
- A. his physical strength
 - B. his father's athletic ability
 - C. his relationship with his father
 - D. his ability to play on a successful team
18. What does the woman find surprising about the man?
- A. the small number of students in his old school
 - B. the length of time since he had last seen an old friend
 - C. the fact that he did not know somebody from his old school
 - D. the number of people from his old school that he did not know
19. What does the man say the Internet has changed?
- A. how people write
 - B. how people read articles
 - C. how people express politeness
 - D. how people communicate professionally
20. What did the man do?
- A. worked hard to meet a deadline
 - B. wrote a paper that he was proud of
 - C. fell asleep and failed to finish his paper
 - D. stayed up all night working with a classmate

LISTENING

Part 2

In this part, you will hear three short talks. After each talk, you will hear six questions about it. Before each talk begins, you will have time to preview the questions that are printed in the test booklet.

You will hear each talk and the questions once. If you want to, you may take notes in your booklet as you listen. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B, C, or D.

Do you have any questions?

Now you will hear the first talk. Look at the questions.

Notes


Listen to a health podcast.

21. What is the main purpose of this talk?
 - A. to correct a piece of misinformation
 - B. to describe the benefits of eating fiber
 - C. to recommend a health supplement for consumers
 - D. to warn about health problems associated with a food additive
22. How does cellulose benefit plants?
 - A. by helping them produce fiber
 - B. by helping them maintain their shape
 - C. by making their cells harder to break down
 - D. by providing nutrients that help plants to grow
23. What does the speaker say about the role of cellulose in human diets?
 - A. It strengthens the walls of cells.
 - B. It helps the body absorb other nutrients.
 - C. It aids digestion because it is indigestible.
 - D. It aids the growth of healthy bacteria in the colon.
24. What is learned about cellulose as a food additive?
 - A. It is mainly used as a thickening agent.
 - B. It exists in both powdered and liquid form.
 - C. It acts differently in dry and liquid products.
 - D. It is usually added to food for its health benefits.
25. Why is wood pulp used in food instead of other sources of cellulose?
 - A. It is less expensive.
 - B. It is easier to obtain.
 - C. It is easier to process.
 - D. It does not add calories.
26. Why does the speaker mention salt, sugar, and fat?
 - A. to emphasize the safety of consuming wood pulp
 - B. to demonstrate the danger of eating processed food
 - C. to illustrate the health benefits of consuming cellulose
 - D. to compare the wood pulp issue to other controversies

LISTENING

Now you will hear the second talk. Look at the questions.

Listen to a woman talking about an animal sanctuary.

27. What does the speaker say prompted her decision to adopt her first blind cat?
- A. an argument with the owner of a blind cat
 - B. disagreement with a policy in her workplace
 - C. several experiences seeing how blind cats were treated
 - D. the sudden blindness of an animal at a shelter where she worked
28. According to the speaker, why do animal shelters often refuse to accept blind cats?
- A. They have limited space.
 - B. They are concerned about costs.
 - C. They are afraid the cats will not be adopted.
 - D. They do not have the expertise to take care of them.
29. What service does the Blind Cat Sanctuary provide?
- A. pet adoption
 - B. veterinary care
 - C. temporary sheltering
 - D. education for blind cat owners
30. Why does the speaker mention mice?
- A. to emphasize the overall health of blind cats
 - B. to describe how cat diseases are often transmitted
 - C. to illustrate one of the benefits of owning a blind cat
 - D. to demonstrate how blind cats interact with one another
31. What does the speaker say is often a cause of cat blindness?
- A. eye infections
 - B. genetic disorders
 - C. low blood pressure
 - D. respiratory illnesses
32. What does the speaker mean when she says: 
- A. Cats need to be taken to the vet regularly.
 - B. Blindness in cats often occurs at night.
 - C. Vets will check the cat's other senses.
 - D. Blindness in cats can often be prevented.

Notes

LISTENING

Now you will hear the third talk. Look at the questions.

Listen to an expert talking about work teams.

33. What aspect of work teams does the speaker mainly focus on?
- A. team size
 - B. team goals
 - C. team leadership
 - D. team communication
34. Why does the speaker mention teachers?
- A. to recount a personal experience with a project team
 - B. to emphasize why efficiently forming teams is important
 - C. to refute a common misconception about forming teams
 - D. to highlight a problem that often arises when forming teams
35. What does the speaker say a team needs to have in order to function well?
- A. diverse range of abilities
 - B. an organized coordinator
 - C. commitment to the project
 - D. members who get along well
36. Which of the following risks would probably be associated with having too many team members on a project?
- A. heightened stress levels
 - B. lack of direction and focus
 - C. difficulty organizing meetings
 - D. disagreements and arguments
37. What does the speaker say should be a consideration when forming teams?
- A. geographical location of team members
 - B. ability of members to perform different roles
 - C. total amount of time required for the project
 - D. current work responsibilities of team members
38. What does the speaker provide?
- A. steps for forming project teams
 - B. criteria for evaluating team members
 - C. principles for forming an efficient team
 - D. benchmarks for evaluating a project's success

Notes

LISTENING

Part 3

In this part, you will hear two segments from a radio program. After each segment, you will hear six questions about it. Before each segment begins, you will have time to preview the questions that are printed in the test booklet.

You will hear each segment twice. Then you will hear the questions once. If you want to, you may take notes in your booklet as you listen. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B, or C.

Do you have any questions?

Look at the questions. Then, listen to the first segment.

Notes

39. What information do the speakers provide about the Sahel?
- A. the length of its seasons
 - B. the average temperature
 - C. the average yearly rainfall
40. Why is the appearance of mosquitos in the Sahel every year a mystery?
- A. because it happens while all the surface water is dried up
 - B. because it happens before new mosquitos can reach adulthood
 - C. because it happens in a region where mosquitos do not usually reproduce
41. Why does Louis Grey mention mosquito migration?
- A. to show how the winds affect the Sahel's climate
 - B. to describe an earlier theory that had to be rejected
 - C. to emphasize the importance of water to mosquitos' life cycle
42. What was Louis Grey's team able to prove about the Sahel's mosquitos?
- A. that they could survive at high altitudes
 - B. that they could live past their normal lifespan
 - C. that they could return to the locations where they were born
43. What are scientists unable to understand about mosquitos during the dry season?
- A. how they reproduce in the absence of water
 - B. how they return to the same locations every year
 - C. how they become inactive for so long without dehydrating
44. What will most likely be the next step in Louis Grey's research?
- A. locating mosquitos during the dry season
 - B. trying to prove that mosquitos are estivating
 - A. waiting for mosquitos to reappear the following year

LISTENING

Look at the questions. Then, listen to the second segment.

Notes

45. What aspect of Steven Bloch's work does this conversation mainly focus on?
- A. his recent projects
 - B. his design philosophy
 - C. his focus on sustainability
46. What does Steven Bloch say architects need to do?
- A. make sure each building has a clear focal point
 - B. think beyond a project's functional requirements
 - C. match a building's design to its surrounding landscape
47. What is meant by the phrase "building meaning"?
- A. establishing a symbolic importance
 - B. gradually developing a sense of purpose
 - C. designing around a building's central function
48. What point does Steven Bloch make about environmental sustainability?
- A. Using local resources can limit a building's environmental impact.
 - B. Being forced to conserve resources can stimulate creative design.
 - C. Sustainable architecture can help change public values and attitudes.
49. Why does Steven Bloch describe his project in China?
- A. to provide an example of sustainable design
 - B. to elaborate on the concept of "building meaning"
 - C. to expand upon the idea of an architect's central role
50. What is a unique design feature of Steven Bloch's project in China?
- A. an indoor garden
 - B. a water recycling system
 - C. the use of bridge technology



End of the listening test

READING: GRAMMAR

51. It is likely that by the time the next census is given, much of the information on the current census _____.
A. to change
B. has changed
C. will have changed
D. has been changing
52. Despite its prevalence and serious effects, diabetes research has historically been underfunded _____ other diseases.
A. for research compare to
B. compared to research for
C. comparing the research of
D. in comparison with researching to
53. _____ staying up all night to finish a very important paper, Sandy slept all day and missed her class.
A. For
B. Once
C. After
D. Since
54. Even the team's most ardent supporters must have been surprised by how successful last season's campaign turned out _____.
A. to be
B. it was
C. had been
D. was being
55. After eight hours of lifting heavy boxes, we all agreed to call off _____ everything in one day.
A. to try move
B. trying to move
C. not try moving
D. on not to try moving
56. Among many employers, there is a common bias that younger workers tend to be _____ are older.
A. innovative more than who
B. those who are innovating more
C. more innovative than those who
D. who are more than innovative that
57. "Do you know when Professor Smith's expected to give us our grades?"
"I'm certain she'll do it _____."
A. soon she's able to
B. as soon as she's able to
C. she's able to do it soon
D. however she's soon able to
58. In a famous study on greed and scarcity, psychologists ran an experiment in which they offered a child two cookies, _____.
A. as small and as large
B. the smaller and larger
C. one was small and large
D. one small and one large

READING: GRAMMAR

59. By comparing students' best and worst scores, the computer develops personalized simulations to keep ____ at their optimal level.
- A. so they perform
 - B. them to perform
 - C. they will perform
 - D. them performing
60. Edward Lorenz coined the phrase "Butterfly Effect" to refer to ____ small occurrences can have enormous consequences.
- A. the manner of
 - B. in which manner
 - C. what is a manner of
 - D. the manner in which
61. The experiment was designed to compare ____ to play a variety of instruments, given no prior musical knowledge.
- A. relatively difficult to learn
 - B. a relative learning difficulty
 - C. being relatively difficult to learn
 - D. the relative difficulty of learning
62. The design by Adams consists of a cluster of buildings ____ a central courtyard containing apple trees and recreational spaces.
- A. arranging from
 - B. arranged around
 - C. are arranged among
 - D. to arrange throughout
63. Only after accepting Kramer's challenge ____ he had fallen into his opponent's trap.
- A. realized Lipsky
 - B. Lipsky did realize
 - C. did Lipsky realize
 - D. was it Lipsky who realized
64. ____ to compare the chlorine found in Bass Lake with that present in various other saline waters.
- A. It may be interested
 - B. It may be of interest
 - C. There may be interest of
 - D. There may be interesting
65. During the Eocene epoch, 50 million years ago, most North American mammals were very ____ what we see today.
- A. differed with
 - B. difference to
 - C. different from
 - D. differently than
66. It is difficult to study human intelligence; what is considered "smart" is determined ____ our genes.
- A. by that culture as
 - B. by as much as culture
 - C. so much by culture than
 - D. as much by our culture as by

READING: CLOZE

This passage is about sanitation.

Good sanitation practices are essential for all food-related operations. Buildings, plants, and other areas must be maintained in sanitary condition and in good (67) . Equipment, such as utensils and surfaces that come (68) contact with food, must be cleaned in a (69) that protects against food contamination. Toxic cleaning compounds, sanitizing agents, and pesticide chemicals need to be identified, and stored (70) that safeguards food, surfaces, or food-packaging materials.

No pests are allowed in (71) area of a food plant. Effective measures should be taken to (72) pests from entering all processing areas and from coming into contact with any food. The use of insecticides is permitted only (73) , in order to keep food processing areas and equipment from being contaminated.

In wet processing operations, all food-contact surfaces need to be cleaned and sanitized before use and after any activity (74) food-contact surfaces may have become contaminated. (75) equipment and utensils are in continuous operation, surfaces should be cleaned and sanitized (76) necessary. Keeping facilities clean ensures the delivery of safe food to consumers.

- | | | |
|-----|-----------------------------|--------------------------|
| 67. | A. kind | C. capacity |
| | B. repair | D. situation |
| 68. | A. into | C. among |
| | B. across | D. through |
| 69. | A. display | C. manner |
| | B. quality | D. program |
| 70. | A. so | C. in a way |
| | B. safely | D. because |
| 71. | A. all | C. either |
| | B. any | D. whatever |
| 72. | A. the | C. exclude |
| | B. ensure | D. prevent |
| 73. | A. in any circumstances | C. in no uncertain terms |
| | B. under certain conditions | D. under consideration |
| 74. | A. as if | C. in order |
| | B. so that | D. during which |
| 75. | A. For | C. Where |
| | B. Since | D. Similarly |
| 76. | A. is | C. well |
| | B. as | D. really |

READING: CLOZE

This passage is about indoor plants.

The term “indoor plant” can be used to define any plant not growing in its natural habitat. To understand why this definition is appropriate, consider the steps (77) to protect less hardy plants by people living in temperate climates. In this (78) of climate, the four seasons are (79): summers are hopefully warm, and winter temperatures often fall below freezing. A plant that (80) in tropical or subtropical regions cannot survive under frosty conditions. It must, therefore, be given (81) during the cold months. (82) some people are fortunate enough to have heated greenhouses, for the majority of people, that means taking the plant indoors.

On the other hand, many people live in regions of the world where the temperatures never fall below freezing. But what about excessive heat? In (83) regions, the outside temperature may become so hot that people need fans and air conditioning systems for comfort. If a plant is (84) to a temperate climate, with four seasons, it will have trouble thriving in a hot environment. (85), it is necessary to try and duplicate the plant’s normal growing environment. Again, (86) taking the plant indoors.

- | | | |
|-----|--------------------------|---------------------------|
| 77. | A. to need | C. needing |
| | B. needed | D. needed by |
| 78. | A. sort | C. mildest |
| | B. time | D. temperature |
| 79. | A. several | C. peculiar |
| | B. express | D. distinct |
| 80. | A. stems | C. originates |
| | B. creates | D. introduces |
| 81. | A. up | C. protection |
| | B. shield | D. preservation |
| 82. | A. Yet | C. However |
| | B. Despite | D. Although |
| 83. | A. all | C. these |
| | B. the | D. which |
| 84. | A. agreed | C. acquainted |
| | B. apprised | D. accustomed |
| 85. | A. Otherwise | C. In such cases |
| | B. Nevertheless | D. In all likelihood |
| 86. | A. it may sometimes need | C. without having to |
| | B. this often means | D. in correspondence with |

READING: VOCABULARY

87. The new policy will _____ tough penalties on people who are found to be using university property for personal business.
- A. incite
 - B. impose
 - C. confer
 - D. prosecute
88. _____, the same students who participate in the winter program should continue to work on the project in spring, to ensure continuity.
- A. Ideally
 - B. Promptly
 - C. Afterwards
 - D. beforehand
89. A hypothesis is a proposed explanation for a phenomenon or problem, often _____ on prior knowledge and logical deduction.
- A. based
 - B. settled
 - C. worked
 - D. related
90. In early August, the Oceanic Administration updated its Atlantic hurricane _____, predicting a season with an above-average number of tropical storms.
- A. chance
 - B. outlook
 - C. direction
 - D. viewpoint
91. To _____ with the museum's fifth anniversary, the six statues went on full display in June, gleaming from their modern makeover.
- A. concur
 - B. contract
 - C. coincide
 - D. converge
92. After a second student became ill, officials agreed to investigate the cafeteria's quality issues in _____ with an independent auditor.
- A. reference
 - B. accordance
 - C. conjunction
 - D. consequence
93. The Patels' missing puppy finally _____ at their door the day after they put posters all over the neighborhood.
- A. let in
 - B. ran away
 - C. turned up
 - D. showed off
94. All _____ from the auction will go toward WHQR to help support their music and local news programming.
- A. portions
 - B. products
 - C. proceeds
 - D. premiums

READING: VOCABULARY

95. Florida's heat waves, with temperatures over 100°F, have put both young and old at ____ of heat-related illnesses.
- A. risk
 - B. crisis
 - C. danger
 - D. prospect
96. Student Affairs Office representatives are required to respond to complaints and try to ____ any problems students may have.
- A. recede
 - B. resolve
 - C. restrict
 - D. reinforce
97. "I'm getting frustrated that I haven't even been called in for an interview."
" ____ . I'm sure you'll find a job soon."
- A. Bring it up
 - B. Figure it out
 - C. Hang in there
 - D. Have a go at it
98. In the past 36 years, George Metz reckons that he has run more than 20,000 miles – ____ to take him halfway around the world.
- A. ample
 - B. enough
 - C. plentiful
 - D. complete
99. Historically, the city's residents lived and shopped near their workplaces, which explains why each neighborhood has its own distinctive ____ .
- A. aspect
 - B. complex
 - C. character
 - D. aspiration
100. When describing your product, try to provide detailed information about its features and avoid anything ____ or exaggerated.
- A. ambient
 - B. amicable
 - C. amusable
 - D. ambiguous
101. Dr. Lee's work is often cited by opposite sides in the fierce national ____ over free-market competition in public schools.
- A. culture
 - B. debate
 - C. education
 - D. contention
102. The expanding economy created new freedom for young people, who ____ began to leave their families and live on their own.
- A. distinctly
 - B. summarily
 - C. increasingly
 - D. consecutively

READING

This passage is about a form of energy.

Wind turbines take the energy of the wind and convert it to electrical power. The idea of harnessing the wind's power has existed for thousands of years in the form of windmills and water pumps, but modern engineers have extended this concept to a wide range of applications, from small devices that power traffic lights, to multi-acre wind farms that power entire cities.

The largest wind turbines in use today rise to about 400 feet in height. They require huge towers with deep foundations, are expensive to build, and are vulnerable to weather-based interruptions. For at least a century, engineers have dreamed of pulling electricity from high in the atmosphere, where the winds provide as much as four times the power of ground-level flows. However, only recently have lightweight materials and computer guidance systems emerged that make the idea feasible.

While no single design has emerged as a frontrunner, the most efficient airborne turbines swoop through the air like a kite at altitudes of 800 to 2000 feet. Known as crosswind models, these models are equipped with rotors that act as both turbines and propellers and are tethered to the ground using a long cable. Direct-drive generators send electricity down the tether to a ground station. Given the higher wind speeds at altitude, crosswind turbines can deliver twice the energy per unit of capacity than conventional turbines, and with no tower, they use 90% less material, reducing costs.

For all their advantages, however, the questions surrounding airborne wind power generation are significant. How do you safely suspend airborne turbines hundreds or thousands of feet off the ground? How do you avoid interference with aviation? How do you keep them aloft for long periods of time without having to perform maintenance? Enthusiasts for the technology believe all these issues are not only surmountable, they are worth overcoming, because when it comes to wind's potential for providing consistent, inexpensive, and renewable energy, the sky is literally the limit.

103. What is the main purpose of the first paragraph?
 - A. to compare wind power to other technologies
 - B. to place modern turbines in a historical context
 - C. to describe the problem wind turbines are designed to solve
 - D. to present the range of tasks airborne turbines are capable of performing
104. What is said to be a benefit of airborne vs ground-level turbines?
 - A. faster power generation
 - B. more reliable access to energy
 - C. increased power storage capacity
 - D. less vulnerability to electrical interference
105. What is implied about crosswind models?
 - A. They travel higher into the atmosphere than other airborne turbines.
 - B. They are the airborne turbine design most likely to be mass-produced.
 - C. They generate electricity with the least waste of materials and effort.
 - D. They need to be used in conjunction with ground-based wind turbines.
106. What function does the tether play in crosswind turbines?
 - A. It stores energy.
 - B. It generates power.
 - C. It enables navigation.
 - D. It transmits electricity.
107. What is said to be a challenge for modern turbines?
 - A. servicing equipment at high altitudes
 - B. producing them at an inexpensive price
 - C. avoiding interference from flying animals
 - D. generating sufficient energy to power big cities
108. In the final sentence of the last paragraph, what does the author mean by **surmountable**?
 - A. debatable
 - B. vulnerable
 - C. unavoidable
 - D. conquerable

READING

This passage is about a study involving dogs.

Behavioral evidence has long suggested that dogs can recognize human emotions. A new study now helps us understand why. The research shows that dogs, like humans, have a dedicated region in their brains that processes emotional information.

Researchers in the 1990s first identified a part of the human brain that processes the non-linguistic aspects of human voices. That is, this region does not decode words and sentences; rather, it registers the emotional tone of the sounds, such as whether a speaker is happy, angry, or afraid. Later, macaque monkeys were found to have a similar region of the brain. The new experiment was designed to see if this brain region could be found in an animal that is not a primate.

Scientists used the same technology that had been used with humans and macaques, scanning the brain with an MRI scanner that measures brain activity and records which areas are active. The researchers tested 11 dogs and compared their brains to those of 22 human volunteers. They put headphones on each participant and let them listen to three types of sounds: human voices, dog vocalizations, and "environmental noises" (cars, ringing phones).

The team discovered that dogs and humans process "emotional sounds" similarly. When the researchers played human sounds, such as laughter, an area near the dogs' primary auditory cortex lit up – exactly the same as in humans. Similarly, emotionally charged dog sounds, such as growling, lit up the same brain region in both groups. Predictably, both groups responded most strongly to sounds made by their own species. One surprise, however, was that one region of the brain — the frontmost portion of the temporal lobe — became strongly activated when both dogs and people heard human voices. This result suggests that dogs' minds are keenly attuned to human emotions.

This may help explain the long and special relationship between the two species. Humans domesticated dogs over 30,000 years ago, and dogs have long been considered "man's best friend." The recent study suggests that the parallel brain sensitivity to voices and emotions may partially account for our unique bond.

109. What is a significant finding of the new study?
 - A. definitive proof that dogs are capable of experiencing emotions
 - B. evidence of an emotional processing center in a non-primate brain
 - C. discovery of a part of the brain that processes voices non-linguistically
 - D. confirmation of an evolutionary connection between humans and dogs
110. What can be inferred about the emotional processing center of the human brain?
 - A. It is able to convert words into emotions.
 - B. It does not respond to offensive language.
 - C. It is located in the frontmost portion of the temporal lobe.
 - D. It responds differently depending on one's relationship to the speaker.
111. What is mentioned as a feature of the new study?
 - A. Sounds were presented in groups of three.
 - B. Twice as many dog subjects as humans were used.
 - C. It was a continuation of research conducted in the 1990s.
 - D. Innovative use of brain scanning technology was involved.
112. What result of the new study does the author suggest could have been anticipated?
 - A. The strong activation of dogs' brains in response to human voices.
 - B. The lack of response by humans to emotionally charged dog vocalizations.
 - C. The identification of an area in dogs' brains that processes emotional sounds.
 - D. The responsiveness of both groups to sounds made by their own species.
113. What does the word **this** in the first sentence of the last paragraph refer to?
 - A. hearing human voices
 - B. human domestication of dogs
 - C. attunement to human emotions
 - D. relationship between the two species
114. What does the author imply in the final paragraph?
 - A. Dogs' brains have physically evolved.
 - B. Domestication of dogs increased dogs' sensitivity.
 - C. Dogs and humans have similar brain sensitivity.
 - D. Dogs only recently developed sensitivity to human emotions.

READING

This passage is about an astronomical event.

Astronomers say four giant galaxies are crashing into each other, in one of the biggest interstellar pileups ever recorded. The galaxies will eventually merge together into a single galaxy 10 times larger than our own Milky Way. Scientists say the event provides an extraordinary opportunity to study how galaxies form.

Galactic mergers are not uncommon in the universe. Mergers between one large galaxy and several smaller ones – called minor mergers – are well documented. Mergers between two galaxies of similar size have also been observed. A merger between multiple large galaxies, however, is unprecedented and when it is completed, the resulting galaxy will be one of the biggest in the universe.

The event was first spotted when scientists at the Müller Observatory observed an unusually bright plume of light emanating from four elliptical galaxies approximately five billion light years from Earth. Analysis of the plume revealed it was comprised of billions of stars being hurled out from the ongoing clash. Subsequent observations through an X-Ray telescope were used to calculate the mass of the clashing galaxies, which revealed they were among the largest in that sector of the universe.

All the stars studied so far from the merger appear to be over 10 billion years old – relatively old by galactic standards. Until recently, this would have contradicted a major theory of galactic formation: the hierarchical model. Under this model, smaller galaxies undergo successive mergers to form larger ones, creating stars as they go. By this theory, larger galaxies such as the four currently merging should contain much younger stars.

In the current merger, however, it appears no new stars are being formed. The explanation may lie in the concept of gas-rich vs gas-poor mergers. In gas-rich mergers, the galaxies are soaked with gas that ignites to form new stars. In gas-poor mergers, no new stars are formed. Indeed, the Müller observations demonstrate that gas is a missing component in the current quadruple merger, perhaps explaining why only old stars have been found.

115. What can be inferred about the phenomenon described in this article?
- A. It confirmed an earlier scientific theory.
 - B. It took multiple observations to be confirmed.
 - C. It was mistaken at first for a different phenomenon.
 - D. It required the cooperation of several observatories.
116. What is unusual about the astronomical event that is underway?
- A. the number of galaxies that are merging
 - B. the amount of gas in the merging galaxies
 - C. the large dimensions of the merging galaxies
 - D. the similarity in size between the merging galaxies
117. Why are minor mergers mentioned?
- A. to emphasize the uniqueness of the current event
 - B. to provide background on how galaxies are formed
 - C. to give a sense of the mass of the astronomical event
 - D. to provide a sense of the size of the galaxy being formed
118. What specific information does the article provide about the galaxies involved in the current merger?
- A. their shape
 - B. their total mass
 - C. their speed of travel
 - D. their distance from each other
119. What is the relevance of the galaxies' age?
- A. It explains why the merger is occurring.
 - B. It illustrates how young stars are formed.
 - C. It clarifies the role of gas in galactic mergers.
 - D. It supports a new theory of galactic creation.
120. What is implied about the role of gas in galactic mergers?
- A. The size of the galaxies indicates the presence of gas.
 - B. The presence of gas equates to the size of the merger.
 - C. The lack of gas correlates to the absence of young stars.
 - D. The presence of young stars indicates a possible lack of gas.

— End of the test —

TEST 1 VOCABULARY REVIEW

COLLOCATIONS

1 Match the words in list A with those in list B to make common collocations. Then, use these collocations to complete the sentences.

List A	Answer	List B
0 enclose	<u>c</u>	a an order
1 undergo	_____	b the power of
2 process	_____	c a letter
3 surmount	_____	d a riot
4 harness	_____	e information
5 incite	_____	f an operation
6 place	_____	g a problem
7 generate	_____	h nerves
8 stimulate	_____	i electricity

- 0 Just enclose a letter about yourself in the prepaid envelope and mail it to us.
- 1 Engineers are developing new technology that will _____ deep ocean currents in order to produce electricity.
- 2 Doctors advised the player to _____ on his injured leg.
- 3 So as not to _____ among demonstrators, the job-cut announcement was deferred.
- 4 Giant wind turbines are used to _____ without the need to use fossil fuels.
- 5 To _____ successfully, one must consider what caused it in the first place.
- 6 Although these lizards do not have ears, sound vibrations in the air _____ in their skin.
- 7 There weren't any wireless keyboards in stock so I had to _____ online for a new one.
- 8 The human brain cannot _____ that is flashed on a screen for less than 0.1 seconds.

2 Replace the words in *italics* with more suitable verbs from the box.

• postponed • **gained** • transmitted • lit up • restricted
• tethered • reckoned • affected • settled • imposed • performed

- 0 **Knowledge** isn't *earned* at school by students, it is gained.
- 1 An **estimated cost** isn't *induced* by a builder, it is _____.
- 2 A **region of the brain** isn't *ignited* when stimulated, it is _____.
- 3 A **horse** isn't *restrained* to a post by the reins, it is _____.
- 4 An **argument** isn't *closed* when a solution is reached, it is _____.
- 5 **Maintenance** is not *prepared* on an old bridge, it is _____.
- 6 A **mathematical equation** isn't *calculated* when new data has to be included, it is _____.
- 7 The **flow** of a river isn't *bound* by a dam, it is _____.
- 8 A **penalty** is not *prosecuted* on a soccer player with questionable conduct, it is _____.
- 9 An **appointment** isn't *prolonged* if someone doesn't turn up, it is _____.
- 10 **Electricity** is not *powered* down a cable from a power plant, it is _____.

VERBS

3 Choose the correct verb from the list below to complete each sentence.

• agreed • tethered • concurred • attuned • conferred • settled
• coincided • equipped • emanated • imposed

- 1 The friends eventually _____ to meet after class.
- 2 It took a while but they finally _____ on a solution to their problem.
- 3 The movie's release _____ with the 500th anniversary of the battle it depicts.

- 4 The authorities have _____ tougher speeding restrictions on motorists.
- 5 The strange red light _____ from somewhere on the other side of the hill.
- 6 The computer gaming industry is successful because it is _____ to the demands of gamers.
- 7 Her ideas _____ with mine.
- 8 Until his rescue, the poor dog had been _____ to the same tree for years.
- 9 According to the rights _____ on him by the constitution, the President can quash a criminal conviction.
- 10 None of the recipients knew that the parcel was _____ with a hidden camera.

NOUN PHRASES

- 4 Use the nouns in the box to complete the sentences, paying attention to meaning and structure. Clues are in bold.

• standards • **response** • conjunction • merger • sensitivity
• range • risk • reference • **debate** • bond • **clash**

- 0 He sent her an e-mail **in** _____ **response** _____ **to** the invitation.
- 1 In his speech, the President made _____ **to** the growing number of cyber attacks.
- 2 They worked in _____ **with** their teammates to finish the project.
- 3 Mary's deep _____ **to** the emotional needs of her students was what made her such a successful teacher.
- 4 By riding without a helmet, you put yourself **at** _____ **of** serious injury.
- 5 A _____ **between** the companies would be beneficial in terms of shared production costs.
- 6 There is a special _____ **between** teammates who have played basketball together for so many years.
- 7 The _____ **over** introducing higher fees for university students raged in the press.
- 8 The violent _____ **between** supporters of rival teams resulted in a number of injuries.
- 9 The grade average at this school is high, **by** national _____.
- 10 The new e-watch has a wide _____ **of** applications, including being used to monitor heart rate.

- 5 Circle the correct noun, based on the definitions given.

- | | |
|---|--|
| 1 grey matter which is responsible for higher mental functions: | cortex / duplicate / plume |
| 2 an investigation in order to find information and/or the facts: | prospect / research / discovery |
| 3 a machine for forcing air or water along pipes: | pump / rotor / flow |
| 4 a person's perspective or how someone sees or understands things: | viewpoint / consequence / vocalization |
| 5 an object that rises high and swoops through the air: | tower / kite / cable |
| 6 the properties and qualities of something, making it distinct: | origin / character / region |
| 7 a machine that rotates very fast, to generate electricity: | turbine / scanner / energy |
| 8 money collected by an event, such as a charity or an auction: | process / proceeds / portions |

ADJECTIVES

- 6 Choose the correct adjective from the box to complete each sentence.

• unprecedented • **lightweight** • ongoing • ambiguous • domesticated
• feasible • amicable • distinct • ambient • conventional • approximate

- 0 _____ **Lightweight** _____ materials have low mass and can be used to build airplanes.
- 1 A(n) _____ answer is a largely confusing and perplexing one.
- 2 a(n) _____ event is not comparable to any other event that has happened before
- 3 The _____ temperature refers to how hot or cold the immediate surroundings are.
- 4 Two _____ styles of handwriting are recognizably different.
- 5 A(n) _____ investigation has not been concluded yet.
- 6 A(n) _____ agreement is characterized as being friendly and peaceful.

- 7 A(n) _____ way of doing something is not new or radical in any way.
 8 A(n) _____ figure is as close as possible to the exact figure
 9 A(n) _____ animal is one which has been house-trained.
 10 When a plan or an idea is _____, it means that it is possible to put it into practice.

7 Circle the correct answer to complete the text.

The three-color traffic light system is (1) **acquainted / familiar / accustomed** to just about everyone, drivers and non-drivers alike. Each of the three colors (2) **corresponds / parallels / applies** to intuitive associations. Red, instinctively associated with danger, means 'stop', in no uncertain (3) **terms / components / portrayals**. Green, the most soothing color in the spectrum, means 'OK to go'. In the middle (4) **lies / suspends / turns** amber, a complex non-primary color, with no immediate connotations. Given the ambiguity of amber, a logical (5) **deduction / summary / likelihood** is that this color means neither 'stop' nor 'go', but rather: 'get ready to do one of the two'.

The traffic light is designed to interrupt traffic (6) **proceeds / capacities / flows** as they (7) **converge / impose / emerge** from different directions. Without traffic lights positioned at large junctions, multiple vehicles would (8) **merge / crash / hurl** into each other, and (9) **pileups / postponements / portions** would be inevitable.

Nevertheless, many drivers still (10) **concur / consider / cite** traffic lights to be a nuisance. As soon as green changes to amber, many (11) **promptly / ideally / distinctively** step on the gas, in order to avoid having to wait when the light switches to red. Such selfish driving behavior is not only reckless but also futile, as drivers who think themselves smart enough to cheat one red light will no doubt get caught behind the next one, a few hundred meters further down the street. Since all traffic lights on the same street work in (12) **conjunction / contradiction / contamination** with each other, drivers may beat one, but they won't beat them all.

8 What about you? Discuss your answers to this questionnaire with your teacher.

- 1 Did you work in _____ with any other students to complete these exercises?
 a contention b consequence c collocation d conjunction
- 2 Are you going to have your answers _____ by someone?
 a qualified b verified c surmounted d settled
- 3 Were you able to _____ the meaning of a word by looking at how it was used in the sentence?
 a function b address c interpret d sound
- 4 Do you expect to have a(n) _____ over any of your answers with anyone?
 a interpretation b classification c inspiration d debate
- 5 Would you like to be able to use vocabulary like a _____ speaker?
 a vigilant b native c sensitive d wary
- 6 Has this review helped you _____ knowledge and increase your level of vocabulary expertise?
 a incite b allocate c gain d prolong

