

UNIT 1: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. When you are promoted to a(n) _____ position, you will be given a private office on the top floor.
- a. executive
 - b. founder
 - c. assembly

ANSWER: a

POINTS: 1

2. Much of the course involved roleplaying and acting out _____ situations.
- a. troublesome
 - b. imaginary
 - c. inevitable

ANSWER: b

POINTS: 1

3. Research has shown that flexible working hours are an effective workplace _____.
- a. influence
 - b. automation
 - c. incentive

ANSWER: c

POINTS: 1

4. With rapid advancements in artificial intelligence, shifts in the job market are _____.
- a. imaginary
 - b. x repetitive
 - c. inevitable

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

5. The company aims to _____ productivity and efficiency by creating a positive work environment.
- maximize
 - accelerate
 - spur

ANSWER: a

POINTS: 1

Complete the sentences with the correct words.

master	relate to	repetitive	spur	troublesome
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6. It took the carpenter many years of hard work and dedication to _____ his craft.
7. In a bid to _____ creativity, the company redesigned its office to be more open and less formal.
8. As artificial intelligence advances, many employees are concerned about losing their jobs. I could also lose my job to automation, so I can _____ how they are feeling.
9. Most people don't want to do the same thing over and over again. They prefer jobs that aren't _____.
10. The office's outdated software made every minor task more _____ than it needed to be.

ANSWERS: 6. master, 7. spur, 8. relate to, 9. repetitive, 10. troublesome

POINTS: 5

LEVEL 4 Assessment Answer Key

Match the words to the sentences.

- | | | | |
|---|---|---|---------|
| 11. The restaurant proudly presented its signature dish—an artificial _____ alternative that tasted remarkably similar to the real thing. | ● | ● | a. meat |
| 12. The team of researchers worked to create an artificial _____ that could potentially restore a person’s vision. | ● | ● | b. limb |
| 13. Advances in medical technology led to the development of a sophisticated artificial _____ with fine motor control. | ● | ● | c. eye |

ANSWERS: 11. a, 12. c, 13. b

POINTS: 3

Complete each sentence with the correct form of the word in parentheses.

14. The global training program hopes to promote cooperation between the regions and _____ (harmony) operations within the company.

ANSWER: harmonize

POINTS: 1

15. The company’s success can be attributed to the efficient _____ (optimal) of its recruitment and training programs.

ANSWER: optimization

POINTS: 1

16. The government is working on the _____ (modern) of public infrastructure to improve urban living conditions.

ANSWER: modernization

POINTS: 1

Read the passage.

The Robot Revolution Has Arrived (by David Berreby)

A Even before the COVID crisis added its impetus, technological trends were accelerating the creation of robots that could fan out into our lives. Mechanical parts got lighter, cheaper, and sturdier. Electronics

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packed more computing power into smaller packages. Breakthroughs let engineers put powerful data-crunching tools into robot bodies. Better digital communications let them store robot “brains” in a computer elsewhere—or connect the minds of hundreds of robots, letting them share a collective intelligence, like bees in a beehive.

- B** Today, robots take inventory and clean supermarket floors. They shelve goods and fetch them for mailing in warehouses. They cut lettuce and pick apples and even raspberries. They help autistic children socialize, and stroke victims regain the use of their arms and legs. Robots now deliver food in Milton Keynes, England, tote supplies in a Dallas hospital, and disinfect hospital rooms in China and Europe.
- C** According to Daron Acemoglu, an economist at MIT who has studied the effects of robots and other automation, there is a particular zeitgeist among many technologists and managers that humans are troublesome. Robots, after all, don’t need paid vacations or medical insurance. Furthermore, many nations actually encourage automation with tax breaks and other incentives. Companies thus save money by cutting employees and adding robots.
- D** Back at the wind farm site in Colorado, executives from the Mortenson Company, a Minneapolis-based construction firm that has hired Built’s robots since 2018, told me about a dire shortage of skilled workers in their industry. Built robots dug 21 foundations at the wind farm.
- E** “Operators will say things like, Oh, hey, here come the job killers,” said Derek Smith, lean innovation manager for Mortenson. “But after they see that the robot takes away a lot of repetitive work and they still have plenty to do, that shifts pretty quickly.”
- F** Once the robot excavator finished the dig we’d watched, a human on a bulldozer smoothed out the work and made ramps. “On this job, we have 229 foundations, and every one is basically the same spec,” Smith said. “We want to take away tasks that are repetitive. Then our [human] operators concentrate on the tasks that involve more art.”
- G** Robots can be programmed or trained to do a well-defined task—dig a foundation, or harvest lettuce—better or at least more consistently than humans can. But none can equal the human mind’s ability to do a lot of different tasks, especially unexpected ones. None has yet mastered common sense.
- H** Today’s robots can’t match human hands either, said Chico Marks, a manufacturing engineering manager at Subaru’s auto plant in Lafayette, Indiana. “Routing a wiring harness into a vehicle is not something that lends itself well to automation,” Marks said. “It requires a human brain and tactile feedback to know it’s in the right place and connected.”
- I** Robot legs aren’t any better. In 1996, Manuela Veloso, an AI roboticist at Carnegie Mellon University in Pittsburgh, was part of a challenge to create robots that would play soccer better than humans. She was one of a group of researchers that year who created the RoboCup tournament to spur progress. Today RoboCup is a well-loved tradition for engineers on several continents, but no one, including Veloso, expects robots to play soccer better than humans anytime soon.

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- J** “It’s crazy how sophisticated our bodies are as machines,” she said. “We’re very good at handling gravity, dealing with forces as we walk, being pushed and keeping our balance. It’s going to be many years before a bipedal robot can walk as well as a person.”
- K** Robots are not going to become artificial people that completely replace us. However, the workplace of the near future will likely be an ecosystem of humans and robots working together to maximize efficiency.
- L** According to Veloso, it is an inevitable fact that machines and artificial creatures will become a significant part of our daily lives. The time, she suggests, for us to start accepting them around us like a new species and learning to relate to them—the way we do with pets and other humans—is now.

Choose the correct answers.

17. What technological trends described in the first paragraph have led to the emergence of robots in various aspects of our lives?
- a. Breakthroughs in medical research helped improve robot “brains.”
 - b. Advancements in the size, weight, and affordability of mechanical parts.
 - c. Engineers found ways to access electrical power more cheaply.

ANSWER: b

POINTS: 1

18. How did human operators’ attitudes change after experiencing the presence of robots in the workplace, according to Derek Smith?
- a. They understood that robots can free them up to do more creative work.
 - b. They realized that robots would make their jobs obsolete in the near future.
 - c. They found that robots were able to display common sense.

ANSWER: a

POINTS: 1

19. In the first sentence of paragraph J, the word *crazy* is closest in meaning to which word?
- a. absurd
 - b. peculiar
 - c. astonishing

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

20. What is NOT mentioned as an advantage that humans have over robots?
- a. The flexibility to deal with unexpected obstacles that might interrupt a task.
 - b. The ability to work outdoors in all kinds of weather.
 - c. The sophistication of manual dexterity and tactile senses.

ANSWER: b

POINTS: 1

21. How does Manuela Veloso imagine the future relationship between humans and robots?
- a. Humans and robots will collaborate to achieve enhanced productivity.
 - b. The workplace of the future will have full integration of robots freeing humans from having to work.
 - c. There will come a time when humans start keeping robots as pets.

ANSWER: a

POINTS: 1

Read the passage.**Digital Communication in the Modern Workplace**

- A** Rapid technological advances in the last 40 years have completely changed the landscape of work life. Work chat platforms—software that allows employees to send instant messages, share files, and have video conferences—have accelerated communication and collaboration between people in offices all over the world. However, while they offer undeniable benefits, they also come with their share of challenges. So how can we maximize the benefits and minimize the drawbacks of online communication tools at work?
- B** One of the most significant positive impacts of work chat platforms is their ability to make office communication more efficient than ever before. They eliminate the need for prolonged email chains or physical meetings. With real-time messaging, teams based in different locations can communicate and collaborate in an instant, sharing ideas, making decisions, and resolving issues promptly.
- C** However, this enhanced efficiency comes at a potential cost. In particular, the brief nature of written communication on these platforms can lead to miscommunication between different generations due to their distinct communication styles. Younger generations, often more used to texting than speaking, are quite comfortable conducting business discussions via short, direct written messages, even using animated gifs and emojis. In contrast, older colleagues might prefer traditional face-to-face conversations or video conferences, where tone and nonverbal cues play a vital role. They cannot relate to the casual nature of texts and perceive younger coworkers as unprofessional.
- D** Something that would have been unimaginable just a few decades ago is the rise of remote working. The ability to install these work chat platforms on personal devices has made remote working not only feasible

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but inevitable. These tools have allowed employees to collaborate smoothly from various locations, transforming how organizations operate. Remote work has proved crucial, especially in times of crises like the COVID-19 pandemic. Through video conferencing and instant messaging, colleagues can work together on projects, attend meetings, and maintain a sense of connection despite never being in the same physical location. It has also expanded the talent pool for employers, giving them access to a wider range of skilled individuals regardless of where they are based.

- E** For some, the ability to work from home has allowed them a greater work-life balance. Less time commuting means more time spent with family, which also cuts the cost of care for children and elderly relatives by a considerable amount. For others though, the boundaries between work and personal life have become less distinct. Messaging apps have made it challenging for individuals to disconnect from work. The constant notifications and messages can create an environment where the pressure on employees to respond is relentless, even outside the regular workday. Many workers are afraid of being perceived as someone who responds to questions too slowly, or who is not immediately available to discuss issues that arise. This erodes the clear line between work and leisure, potentially leading to burnout and decreased overall well-being. The ability to answer work-related queries during weekends or evenings may sound like an advantage, but it can ultimately harm both individual and team dynamics if not managed effectively.
- F** To achieve a balanced approach, it is essential to master the art of using work chat platforms wisely in the workplace. First, it's crucial to recognize and respect diverse communication styles. Training sessions that focus on effective written communication can bridge the gap between different generations, fostering a culture of clear and precise messaging. Second, to address the challenges of remote working, establishing guidelines for work hours and response expectations can help employees maintain a healthy work-life balance. Encouraging employees to disconnect from work-related communication outside of work hours can prevent burnout and improve overall mental well-being. Third, promoting occasional offline team-building activities can strengthen personal connections in a way that digital interactions cannot.
- G** Work chat platforms have undeniably transformed the landscape of work life, accelerating communication, enabling remote work, and altering how we balance work and personal time. While they offer unparalleled efficiency and flexibility, they also pose challenges related to miscommunication and overwork. By acknowledging and addressing these issues, companies can enjoy the positive impacts of work chat platforms while minimizing their potential negative impacts.

Choose *True* or *False*.

22. Work chat platforms have made video meetings more necessary by eliminating prolonged email chains.
- True
 - False

ANSWER: b

POINTS: 1

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23. Some people find younger colleagues unprofessional because their written communication styles are often informal.
- a. True
 - b. False

ANSWER: a

POINTS: 1

24. Companies can now hire workers from a larger pool of candidates thanks to the rise in popularity of remote working.
- a. True
 - b. False

ANSWER: a

POINTS: 1

25. According to the passage, some people are working more in their free time because they do not want to be considered unresponsive.
- a. True
 - b. False

ANSWER: a

POINTS: 1

26. The passage recommends offline team-building activities as a strategy for preventing burnout.
- a. True
 - b. False

ANSWER: b

POINTS: 1

Choose the correct answers.

27. In the first sentence, what synonym could be used instead of *rapid*?
- a. strong
 - b. prompt
 - c. swift

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

28. In the last line of paragraph **D** (*regardless of where they are based*), who or what does “they” refer to?
- a. work chat platforms
 - b. skilled individuals
 - c. employers

ANSWER: b

POINTS: 1

Complete each sentence. Choose the correct word.

29. Robots are becoming increasingly sophisticated in their ability to perform complex tasks. For this reason, _____ are being integrated into almost every industry. (**reference word**)
- a. we
 - b. they

ANSWER: b

POINTS: 1

30. Take an action as simple as climbing up stairs. It took years of development before robots were able to manage this seemingly _____ activity. (**synonym**)
- a. plain
 - b. easy

ANSWER: b

POINTS: 1

31. Predictive text makes typing faster by suggesting words the user may wish to enter. _____ are based on context, word frequency, and the first letters typed. (**different word form**)
- a. Predictions
 - b. Predicts

ANSWER: a

POINTS: 1

32. Artificial intelligence (AI) has advanced so much that robots are now able to learn from their mistakes. However, many people worry that AI _____ are happening too rapidly for us to control. (**different word form**)
- a. advancements
 - b. advancing

ANSWER: a

POINTS: 1

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33. Robots are being used to great effect to care for senior citizens. Robotic assistants are now able to provide both physical care and companionship for the _____. (**synonym**)
- a. elderly
 - b. unemployed

ANSWER: a

POINTS: 1

34. A smart home allows its occupants to control home appliances from anywhere via a mobile device, but setting _____ up can cost thousands of dollars. (**reference word**)
- a. that
 - b. one

ANSWER: b

POINTS: 1

Read each essay prompt. Choose the best thesis statement for the prompt.

35. If you were president of your country, which task would you take on during your first month in office?
- a. There are a number of urgent matters that I would deal with right after my election.
 - b. As president, I would increase the budget for education, especially kindergartens.
 - c. I would not like to be president because it involves too much responsibility.

ANSWER: b

POINTS: 1

36. What do you think are the best ways to reduce stress?
- a. There are several relaxation techniques that can lower stress.
 - b. People with reduced stress have been shown to make better decisions.
 - c. On-the-job stress is perhaps the most common form of stress.

ANSWER: a

POINTS: 1

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37. Describe whether you would prefer to work for a salary or to open your own business.

- a. First, when you are an entrepreneur, and your business is successful, there are no limits on how much money you may make.
- b. While there are some advantages to working for a living, for a number of reasons, I have always dreamed of owning my own business.
- c. Working for a salary provides a person with a steady, dependable source of income.

ANSWER: b

POINTS: 1

38. Describe what you consider to be your perfect day.

- a. For me, there are a number of requirements that must be met for a day to be considered perfect.
- b. It is never possible to achieve complete perfection.
- c. I could never consider a cold or rainy day perfect; it has to be warm and sunny.

ANSWER: a

POINTS: 1

39. What are some of the pros and cons of working part-time while in full-time education?

- a. Having a part-time job teaches young people how to manage a budget, how to manage their time, and how to work as part of a team.
- b. Having a part-time job makes it hard to maintain a social life with friends, but it does provide opportunities to network and build connections for the future.
- c. Having a part-time job while at school can increase the stress of students who already have a lot to worry about.

ANSWER: b

POINTS: 1

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Read each description. Choose the example thesis statement that best fits the description.

40. An argumentative thesis statement presents an argument that the writer will support throughout the essay. It takes a clear stance on a specific topic and provides reasons and evidence to support that stance.

- a. The government should implement stricter regulations on plastic usage to combat environmental pollution effectively.
- b. Arguments can be made both for and against banning the use of plastics.

ANSWER: a

POINTS: 1

41. A narrative thesis statement often previews the main topic of the essay with a personal story or experience to hook the reader.

- a. While it is influenced by various cultures in the region, the Maldives has its own unique traditions.
- b. My trip to the Maldives was a transformative experience that opened my eyes in several ways.

ANSWER: b

POINTS: 1

42. A comparative thesis statement compares two or more subjects, highlighting their similarities and differences.

- a. Both online and traditional education methods have their advantages and disadvantages, and choosing the right option depends on individual learning preferences.
- b. Online learning is the future of education, and we should embrace the flexibility and convenience it offers students.

ANSWER: a

POINTS: 1

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43. A cause-and-effect thesis statement explores the roots and consequences of a particular event or situation.
- a. There are both pros and cons to the rapid spread of social media among young people and how they now communicate with each other.
 - b. The rise of social media has led to significant changes in communication styles and interpersonal relationships.

ANSWER: b

POINTS: 1

44. An analytical thesis statement breaks down an issue or an idea into its key components and evaluates them. It doesn't make a claim but rather analyzes the topic.
- a. Reading the novel *To Kill a Mockingbird* changed my life, and is the reason I decided to study law.
 - b. The novel *To Kill a Mockingbird* explores the themes of racial prejudice and moral growth.

ANSWER: b

POINTS: 1

UNIT 2: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. Green spaces should be designed to function as a _____ for small birds and insects.
 - a. habitat
 - b. predator
 - c. hypothesis

ANSWER: a

POINTS: 1

2. The streetlamps are designed to _____ the amount of energy used to light the streets.
 - a. stem from
 - b. minimize
 - c. eradicate

ANSWER: b

POINTS: 1

3. We are increasing the number of garbage cans in the hopes of _____ pests from the park.
 - a. perceiving
 - b. eradicating
 - c. tracking

ANSWER: b

POINTS: 1

4. Without some kind of _____ between the road and the fields, many animals will be killed.
 - a. boundary
 - b. reliance
 - c. reversal

ANSWER: a

POINTS: 1

5. Despite the fact that they are a very dangerous _____, some people keep tigers as pets.
 - a. counterpart
 - b. habitat
 - c. predator

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Complete the sentences with the correct words.

perceived	reliance	stems from	synonymous	track
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6. The _____ on trains to get to work or school means that property prices near the station are very high.
7. The local government is trying to _____ the number of wild birds killed by pet cats in this neighborhood.
8. This breed of dog is _____ as dangerous, so it is not permitted to keep one as a pet in this city.
9. The high crime in the area _____ the lack of prospects for young people here.
10. In many cultures, the presence of cockroaches in a living space is _____ with being unclean.

ANSWERS: 6. reliance, 7. track, 8. perceived, 9. stems from, 10. synonymous

POINTS: 5

Match the words to the sentences.

- | | | |
|---------------|---|---|
| 11. practical | ● | ● a. This location is great, but there are some _____ constraints. There are no parking spaces, for example. |
| 12. time | ● | ● b. Animal testing is generally permitted, but there are _____ constraints limiting what we can and cannot do. |
| 13. ethical | ● | ● c. I'm afraid you'll need to rush through your slides a little because we're facing unexpected _____ constraints. |

ANSWERS: 11. a, 12. c, 13. b

POINTS: 3

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- | | | |
|------------------|---|--|
| 14. countersign | ● | ● a. The central bank increased interest rates to _____ rising prices in the city. |
| 15. counteract | ● | ● b. The owner of the apartment has accepted the terms of the contract, but the buyer will need to _____ it. |
| 16. counteroffer | ● | ● c. He suggested terms that were unfavorable, so I made a _____. |

ANSWERS: 14. b, 15. a, 16. c

POINTS: 3

Read the passage.

Wild Cities (by Christine Dell'Amore)

Coyotes, raccoons, and other animals are adapting to urban life, resulting in increased contact and conflict with humans.

- A** Indeed, coyotes have succeeded despite our best efforts to eradicate them. At least 400,000 are killed each year, about 80,000 by a federal predator control. Vehicle strikes are the main cause of death for Chicago's coyotes, but the animals have learned to avoid cars and can even read stoplights.
- B** Adding to their adaptability is their flexible diet. Coyotes will eat just about anything, from shoe leather to fruit (they can climb fruit trees). According to Gehrt, "Variability is the primary pattern."
- C** Christopher Schell, an urban ecologist at the University of California, Berkeley, and Julie Young, a wildlife biologist with the U.S. Department of Agriculture, are studying how various diets given to captive coyotes could change the animals' behavior. Their hypothesis is that the coyotes eating human food will become bolder around people, which is supported by some anecdotal evidence. Schell and Young theorize that a coyote that eats processed cereal, for instance, will be hungrier and look for food much more frequently than one that eats a nutrition-dense rabbit for breakfast. Though Gehrt has not noticed such a connection in Chicago coyotes, he notes that a reliance on human food does bring coyotes closer to restaurants and homes, which in turn leads to more contact and conflict with people and their pets.
- D** When zoologist Sarah Benson-Amram first started looking into raccoon behavior and cognition about a decade ago, she figured such a common species would have been studied thoroughly. After all, the bushy-tailed omnivores are pop culture icons, jokingly dubbed trash pandas. Instead, Benson-Amram was shocked to find almost nothing in the scientific literature. A few researchers in the early 1900s had tried to study the clever animals, but gave up when their subjects kept breaking out of their cages.
- E** So far, she says, her research has confirmed the raccoon's crafty reputation. In an experiment called reversal learning, she presented raccoons with a box equipped with a button or foot pedal that, when pressed, released food. After the animals figured out how to get the food, the researchers would switch

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the buttons and pedals, forcing them to tweak their strategy. Most of the raccoons were able to solve the problem on the first night. To put that into perspective, only one of six coyotes engaged with the box—and not until the 44th night of testing.

- F** According to Benson-Amram, now at the University of British Columbia in Vancouver, raccoons have a different survival strategy from coyotes: they're successful by exploiting humans, not avoiding them.
- G** Like coyotes and bears, raccoons are expanding throughout North American cities. In Washington, D.C., wildlife researchers Kate Ritzel and Travis Gallo wanted to find out whether raccoons living in the city are bolder and more willing to take risks than those in rural areas. They measured this by observing a raccoon's readiness to investigate an unfamiliar object—in this case, bait buried inside a square of wooden stakes.
- H** The researchers installed more than a hundred automatic cameras throughout the city and rural areas of neighboring Virginia. On a muggy September morning at Fort Totten, Gallo placed the smelly bait—"dead animals in a jar," he called it—while Ritzel strapped a camera to a nearby tree. She would check the videos every two weeks to see which animals had passed through. Her favorite video? A feisty raccoon chasing off a fox.
- I** Months later, Ritzel's data indicated that urban raccoons are more exploratory than their country cousins, taking more time to investigate unusual objects. City raccoons are also more social, traveling in pairs more often than their rural, more territorial counterparts—suggesting that urban raccoons are adapting their behavior to city life.
- J** Until recently, urban wildlife was mostly ignored in scientific research. This is partly because such species are considered pests unworthy of our attention—or not wildlife at all. However, according to Seth Magle—director of the Urban Wildlife Institute at Chicago's Lincoln Park Zoo—we live on a planet that's rapidly urbanizing. It would therefore be unwise to ignore animals that move into urban landscapes. Magle adds that while much of urban ecology focuses on how to minimize conflicts with these animals, we forget that many of our encounters with wildlife are delightful. For Magle, "Another part of coexisting with animals has to do with celebrating these moments."

Choose the correct answers.

17. What is the main question of Christopher Schell and Julie Young's research?
- Are coyotes more afraid of people because they eat our food?
 - Is human food more nutritious for coyotes than their natural diet?
 - Does eating human food make coyotes less afraid to be around people?

ANSWER: c

POINTS: 1

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18. What is the main difference between how coyotes and raccoons interact with humans?
- a. Raccoons are more willing than coyotes to actively look for things they can get from humans.
 - b. Coyotes are less afraid of coming into contact with humans than raccoons.
 - c. Raccoons are more social with humans than coyotes are.

ANSWER: a

POINTS: 1

19. The word *engaged* in the last sentence of paragraph E, is closest in meaning to _____.
- a. fought
 - b. interacted
 - c. employed

ANSWER: b

POINTS: 1

20. Which of the following is NOT mentioned in the article?
- a. Raccoons prefer having processed food to eating dead animals.
 - b. Raccoons are measurably more intelligent than coyotes.
 - c. Raccoons cooperate with each other more in urban settings than in their natural habitat.

ANSWER: a

POINTS: 1

21. According to Seth Magle, we should _____.
- a. consider ways to reduce the number of these pests in our cities.
 - b. ignore the animals so that they don't get used to living in urban landscapes.
 - c. be grateful for the opportunity to live close to these creatures.

ANSWER: c

POINTS: 1

Read the passage.

Learning to Live with Leopards (by Richard Conniff)

A We were sitting in the dark, waiting for the leopards beside a trail on the edge of India's Sanjay Gandhi National Park, 40 square miles of green life in the middle of the city of Mumbai. A line of tall apartment buildings stood just opposite, crowding the park border. It was 10 p.m., and through the open windows came the sounds of dishes being cleaned and children being put to bed. Teenage laughter, a motorcycle revving. The hum and clatter of 21 million people, like a great machine. Somewhere around us, the leopards were listening too, waiting for the noise to die down. Watching.

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- B** About 35 leopards live in and around this park. That's an average of less than two square miles of habitat apiece, for animals that can easily range ten miles in a day. These leopards also live surrounded by some of the world's most crowded urban neighborhoods, housing 52,000 people or more per square mile. (That's nearly twice the population density of New York City.) And yet the leopards thrive. Part of their diet comes from spotted deer and other wild prey within the park. But many of the leopards also slip through the streets and alleys, where they pick off dogs, cats, pigs, rats, chickens, and goats. They eat people too, though rarely.
- C** And yet leopards have become our shadows. They have no choice. Human expansion has already cost leopards an estimated 66 percent of their range in Africa and 85 percent in Eurasia, with most of the loss occurring over the past five decades. In many areas, the only place left to survive is side by side with humans.
- D** Unlike most other big cats, leopards can adapt, up to a point. They can prey on anything—dung beetles, porcupines, 2,000-pound elands. They can make a home at 110 degrees Fahrenheit in the Kalahari Desert or at minus 13 degrees in Russia. They can thrive in sea-level mangrove swamps on the coast of India or at 17,000 feet in the Himalaya. That adaptability, combined with a genius for hiding in plain sight, means leopards are entirely capable of living among humans, as they do in Mumbai. The question is whether humans can learn to live with leopards.
- E** We have a long and complicated relationship, and like much else, it began in Africa. Leopards are a young species: They emerged in their modern form as recently as 500,000 years ago. Like us, they spread out to populate a large chunk of the globe, from the southern tip of Africa to the Russian Far East, as well as west into Senegal and southeast to Indonesia. They may have shadowed early humans, to take advantage of our ability to drive off lions and other competitors or, later, to pick off our livestock.
- F** India may be the real test of survival in a crowded world—and perhaps a model for it—because leopards live there in large numbers, outside protected areas, and in astonishing proximity to people. Attacks on humans are relatively rare. It is far easier to die in India from civilization than from wildness: Nationwide, 381 people are killed every day in road accidents, 80 more on rail lines, and 24 by electrocution. But leopard killings get headlines, partly because they are uncommon and also because they touch something primitive in the human psyche.
- G** I left India thinking that what I had learned of leopards there was far removed from the way people live in more developed countries. Then I arrived back in the United States to an unverified report of a mountain lion four miles from my home on the Connecticut coast, followed by news of a black bear in New Haven—a nearby city. Mountain lions now roam through Los Angeles, coyotes can be seen in Chicago, and great white sharks swim off Cape Cod—a popular tourist resort in the summer months. As human populations expand, and we make the Earth more urban, other carnivores also seem to be adapting and learning to live near us. This is not necessarily a bad thing: Studies have repeatedly shown that healthy predator populations are essential to the health of almost everything else.

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Choose *True, False* or *Not Given*.

22. Sanjay Gandhi National Park is located 40 miles from the city of Mumbai.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

23. Leopards often hunt in the city at night.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

24. Lions and tigers adapt to different environments more successfully than leopards. _____.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

25. Early humans sometimes hunted leopards for food.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

26. According to paragraph **G**, large carnivores are learning to live near urban areas.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the correct answers.

27. In paragraph **D**, which of these phrases is an appositive?

- a. dung beetles, porcupines, 2,000-pound elands
- b. minus 13 degrees in Russia
- c. as they do in Mumbai

ANSWER: a

POINTS: 1

28. In paragraph **G**, which of these phrases is an appositive?

- a. coyotes can be seen in Chicago
- b. a popular tourist resort in the summer months
- c. great white sharks swim off Cape Cod

ANSWER: b

POINTS: 1

Choose the correct option to complete each sentence.

29. Raccoons don't spread as many diseases as bats, _____ carrier of deadly diseases like rabies.

- a. one of the
- b. a number of the
- c. the number one

ANSWER: c

POINTS: 1

30. The bird with the bright green feathers, _____ a male, was seen nesting on the balcony of the apartment building.

- a. as was
- b. likely
- c. on which

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

31. Jacques Cousteau, _____ famous oceanographer, wrote many books describing his underwater adventures.

- a. a
- b. was a
- c. he was a

ANSWER: a

POINTS: 1

32. The tanuki, _____ Japanese animal that looks like a raccoon, is actually a member of the dog family.

- a. which, as a
- b. a
- c. is a

ANSWER: b

POINTS: 1

33. Lake Baikal, _____ oldest and deepest lake in the world, is home to the only exclusively freshwater seals.

- a. the
- b. is the
- c. that the

ANSWER: a

POINTS: 1

34. The tree was probably damaged by the white-tailed deer, _____ deer found in this region.

- a. the most common one
- b. that is one of the common
- c. one of the most common

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each essay prompt. Choose the best thesis statement.

35. How can cities deter crows from getting into privately owned garbage cans?

- a. Crows are extremely intelligent birds that are capable of devising ways to get into household garbage to find food and look for nesting materials.
- b. We can reduce the damage done by crows by raising awareness of the issue and offering locals better garbage cans at subsidized prices.

ANSWER: b

POINTS: 1

36. What are some ways to counteract the negative effects of rural depopulation?

- a. The reduction in the number of people living in the countryside can be slowed by improved infrastructure, grants for businesses, and remote work options.
- b. The negative effects of the declining population outside cities are caused by an aging society, large-scale farming, and lack of public transportation.

ANSWER: a

POINTS: 1

37. Are paved gardens—ones covered in flat stones—worse than those covered with grass?

- a. Recent figures suggest that almost fifty percent of household gardens are now more than three-quarters paved.
- b. Grass-covered gardens are better as they decrease the risk of flooding, reduce the temperature at night, and help prevent the loss of wildlife.

ANSWER: b

POINTS: 1

38. Why are food banks, places that distribute food for free, increasing in number?

- a. A combination of lower wages, increased food prices, and the pandemic have all contributed to the increase in food banks.
- b. Data shows that food banks actively discourage governments from having to deal with poverty.

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

39. Why do squirrels thrive in cities?

- a. Despite an increase in the number of squirrels living in urban environments, their numbers outside big cities are declining slightly.
- b. Cities offer squirrels an unlimited food supply, plenty of shelter, and protection from predators, allowing them to live longer in the city than in the country.

ANSWER: b

POINTS: 1

Read each sentence from an essay. Decide if the sentence belongs in the *introduction*, *body*, or *conclusion* of an essay about why green spaces are important in cities.

40. The first benefit of green spaces is that they provide residents with a place for physical activities.

- a. Introduction
- b. Body
- c. Conclusion

ANSWER: b

POINTS: 1

41. In light of the evidence, prioritizing the creation of green spaces is essential for creating cities that are environmentally responsible for future generations.

- a. Introduction
- b. Body
- c. Conclusion

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

42. Cities are often and somewhat ironically referred to as concrete jungles because they are stony and gray, and lack greenery—but does this have to be the case?

- a. Introduction
- b. Body
- c. Conclusion

ANSWER: a

POINTS: 1

43. The third and final benefit of green spaces is that they provide shade and cool the city.

- a. Introduction
- b. Body
- c. Conclusion

ANSWER: b

POINTS: 1

44. Another benefit is that green spaces serve as centers of social interaction.

- a. Introduction
- b. Body
- c. Conclusion

ANSWER: b

POINTS: 1

UNIT 3: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. She tends to be _____ when appreciating art. Her friend is the complete opposite. He prefers to respond emotionally to it.
- a. analytical
 - b. intimate
 - c. ambiguous

ANSWER: a

POINTS: 1

2. The proceeds from the sale of this painting will go to a good cause: the _____ of our rainforests.
- a. impression
 - b. interpretation
 - c. conservation

ANSWER: c

POINTS: 1

3. The meaning behind the image is very _____. It's not clear what the artist is trying to say.
- a. foremost
 - b. ongoing
 - c. ambiguous

ANSWER: c

POINTS: 1

4. Each individual's _____ of art is unique and personal, so a single painting can have many different meanings.
- a. conservation
 - b. impression
 - c. interpretation

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

5. The breathtaking painting _____ an emotional response within the viewer.
- implied
 - triggered
 - envisioned

ANSWER: b

POINTS: 1

Write each word next to its correct synonym or definition.

	exhibit	exquisite	fake	impression	theoretically
6.	_____	extremely beautiful or appealing to the senses, in a way that is carefully crafted or delicate			
7.	_____	not real, although it appears to be			
8.	_____	something displayed or presented in a public setting			
9.	_____	a feeling one has that remains after meeting or encountering a person or thing			
10.	_____	according to an assumed set of facts			

ANSWERS: 6. exquisite, 7. fake, 8. exhibit, 9. impression, 10. theoretically

POINTS: 5

Complete the sentences with the correct words.

backlash	investigation	memory
----------	---------------	--------

11. The irregularities in the report triggered a(n) _____ into the dealings of the art gallery.
12. The decision to double the entry fee to the art gallery triggered a(n) _____ from visitors.
13. Of all the senses, smell is the one most likely to trigger a(n) _____ from early childhood.

ANSWERS: 11. investigation, 12. backlash, 13. memory

POINTS: 3

LEVEL 4 Assessment Answer Key

ambidextrous	ambience	ambiguous
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14. The instructions given for the assignment were so _____ that the students were unsure about what exactly was expected of them.
15. The baseball player is equally skilled at batting with both his left and right hand as he is completely _____.
16. As we stepped into the cozy cafe, the jazz music playing in the background and the warm lighting created a delightful _____ for a relaxing afternoon.

ANSWERS: 14. ambiguous, 15. ambidextrous, 16. ambience

POINTS: 3

Read the passage.

Making an Impact Through Art

Art has the power to inspire and effect change.

ART FOR SCIENCE

- A** The art of origami has existed in Japan since at least the 17th century. Initially, origami models were simple and used largely for ceremonial purposes. But in the mid-20th century, origami master Akira Yoshizawa helped elevate paper folding to a fine art, breathing life and personality into each creature he designed.
- B** In the late 1950s, Yoshizawa's delicate forms inspired Tomoko Fuse, now one of the foremost origami artists in Japan. Her father gave her Yoshizawa's second origami book when she was recovering from diphtheria as a child. Fuse methodically crafted every model, and she's been entranced with origami ever since. "It's like magic," she says. "Just one flat paper becomes something wonderful."
- C** Among her many achievements, Fuse is famous for her advances in modular origami, which uses interlocking units to create models with greater flexibility and potential complexity. But she thinks of her work as less about creation than about discovering something that's already there. She describes her process as if she's watching from afar, following wherever the paper leads her. "Suddenly, beautiful patterns come out."
- D** Indeed, origami taps into patterns that echo throughout the universe, seen in natural forms such as leaves emerging from a bud, or insects tucking their wings. For these exquisite folds to become scientifically

LEVEL 4 Assessment Answer Key

useful, however, researchers must not only discover the patterns but also understand how they work. And that requires math.

- E** Putting numbers to origami's intriguing patterns has long driven the work of Thomas Hull, a mathematician at Western New England University in Springfield, Massachusetts. Hull still remembers unfolding a paper crane at age 10 and marveling at the ordered creases in the flat sheet. There are rules at play that allow this to work, he recalls thinking. Hull and others have spent decades working to understand the mathematics governing the world of origami.
- F** In his office are an array of models that are folded in intriguing shapes or move in unexpected ways. One is an impossible-looking sheet folded with ridges of concentric squares, which cause the paper to twist in an elegant swoop known as a hyperbolic paraboloid. Another is a sheet folded in a series of mountains and valleys called the Miura-ori pattern, which collapses or opens with a single tug. Dreamed up by astrophysicist Koryo Miura in the 1970s, the pattern was used to compact the solar panels of Japan's Space Flyer Unit, which launched in 1995.
- G** Origami is now pushing the limits of what scientists think is possible, particularly at the tiniest of scales. At the University of Pennsylvania's Singh Center for Nanotechnology, Marc Miskin, an electrical engineer, has been crafting an army of robots, each no bigger than a speck of dust. Such small bots require big creativity. At tiny scales, forces like friction are enormous: gears don't turn, wheels don't spin, and belts don't run. That's where origami comes in. Fold patterns will bend and move the same way at any size, at least theoretically.
- H** Miskin sees a world of possible ways these tiny bots could be used, from manufacturing to medicine. And the venerable art form of origami has provided him and other innovators with a new tool kit to ignite the imagination and create technologies once thought impossible.

Choose the correct answers.

17. How does Tomoko Fuse describe her process for creating works of art in the form of origami?
- a. She claims she is just revealing something that already exists.
 - b. She says that it is like solving a mathematical puzzle.
 - c. She says that it is all about breathing new life into traditional designs.

ANSWER: a

POINTS: 1

18. What inspired Thomas Hull to develop an interest in origami?
- a. He was intrigued by the impressions left on the paper after unfolding origami figures.
 - b. He studied origami in a math class at Western New England University.
 - c. He learned how to make paper cranes as a child.

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

19. What does a “hyperbolic paraboloid” refer to in the context of the passage?
- a. The style of origami invented by Tomoko Fuse to create modular designs with a greater degree of flexibility.
 - b. A type of origami model that was used to compact the solar panels of Japan’s Space Flyer Unit.
 - c. An origami shape bent in a complex series of squares surrounding each other.

ANSWER: c

POINTS: 1

20. What field is NOT mentioned in the passage as an area of application for origami?
- a. architecture
 - b. health
 - c. space exploration

ANSWER: a

POINTS: 1

21. In the first sentence of paragraph C, the word *advances* is closest in meaning to _____.
- a. successes
 - b. developments
 - c. discoveries

ANSWER: b

POINTS: 1

Read the passage.**Is it Art?**

- A** According to the dictionary, art is the expression or application of human creative skill and imagination, typically in a visual form such as painting or sculpture, producing works to be appreciated primarily for their beauty or emotional power. But if something is not created “primarily” to be appreciated for its beauty, does that mean that it cannot be considered a work of art? The idea that art must solely serve visual or emotional purposes is challenged by a diverse range of artistic forms that we see in the world around us.
- B** The earliest known examples of human creativity can be found in prehistoric sites. Dating back tens of thousands of years, the first human-made images can be found in various regions around the world. From the cave paintings of France and Spain to the ancient rock art of Namibia and the dot paintings of the First Nation Aboriginal peoples in Australia, early people everywhere left their mark in the form of some kind of art.

LEVEL 4 Assessment Answer Key

- C** These primitive artworks, often showing animals and hunting scenes, provide a glimpse into the minds of our distant ancestors. While their exact motivations remain unknown, these paintings likely served a range of purposes. They might have been attempts to communicate hunting strategies, to call up spiritual forces to aid in their hunts, or to record significant events in the lives of these early societies. The paintings were therefore more than just aesthetic expressions; they were functional storytelling tools and a means of preserving vital knowledge.
- D** Even though the primary intention behind these works—made by the fingers of people who lived more than 50,000 years ago—might not have been beauty, they undeniably possess artistic qualities thanks to the skillful ways they were created, the use of multiple colors, and the abstract patterns they contain. The level of detail, and the attention to form and color, go way beyond pure practicality.
- E** Architecture is another area in which art can be interwoven with practicality. Numerous architectural marvels, such as the Taj Mahal, the Sydney Opera House, and the Guggenheim Museum, showcase the blending of artistic vision and functional design. These structures capture human creativity and imagination in their forms, materials, and spatial arrangements. Their purpose is not just to shelter or serve functional needs; they trigger feelings of awe and reflect cultural ideologies.
- F** Take, for instance, the Sagrada Familia in Barcelona, a masterpiece designed by Antoni Gaudí. Outside, visitors to the church are amazed by its tall towers, and its walls covered in detailed carvings of trees, flowers, pinecones, and acorns. Built with few straight lines and no right angles, the organic forms almost seem more natural than man-made. But that is nothing compared to the sight that awaits on the inside. The play of light through giant stained-glass windows means that its inside walls are literally painted with light from the sun—a giant canvas that changes color with the time of day.
- G** Fashion is often dismissed as not being serious enough to be considered a legitimate art form. This could be because it is seen as a female pursuit, or because it is so directly associated with commerce. But, like all great art, fashion is a living commentary on the culture of its time. It allows anyone to express their vision of themselves to the people around them.
- H** Avant-garde fashion in particular pushes the boundaries of conventional clothing, focusing on innovation, experimentation, and expression rather than mass appeal or wearability. Take the works of designers like Alexander McQueen and Rei Kawakubo of Comme des Garçons, whose exquisite creations often border on fantasy. These pieces may not be suitable for everyday wear like the mass-produced uniforms of fast fashion, but they serve as vehicles for artistic expression, embodying complex concepts and emotions.
- I** Avant-garde fashion challenges preconceptions about what constitutes clothing, turning the human body into a canvas for bold statements. And whether that art lasts for one season or tens of thousands of years, it is still worthy of appreciation, just like any painting by Leonardo da Vinci or statue by Michelangelo.
- J** The concept of art is wide open to interpretation. It cannot be confined to a narrow definition rooted only in beauty and emotional resonance. History has shown that art's scope is much broader. From cave paintings that bridged utility and expression to architectural wonders that merge function and beauty and avant-garde fashion that disrupts norms, artistic expression takes many forms that challenge the

LEVEL 4 Assessment Answer Key

boundaries of what we consider to be art. Art's essence lies not only in the intentions of the creator; it resides in the infinite imagination and creativity of its viewers.

Choose the correct answers.

22. According to the passage, which of the following best describes the traditional definition of art?
- a. Art is anything created for mass appeal.
 - b. Art involves creative skills applied mainly in visual forms.
 - c. Art is primarily appreciated for its practical application.

ANSWER: b

POINTS: 1

23. What is NOT mentioned as a possible function of prehistoric cave paintings?
- a. They were records of significant religious ceremonies.
 - b. They were plans for how to have a successful hunt.
 - c. They were used as illustrations for telling stories.

ANSWER: a

POINTS: 1

24. The author finds _____ the most artistically pleasing part of the Sagrada Familia.
- a. the fact that it doesn't contain any right angles
 - b. the carved images that cover the outside of the building
 - c. the colors created by the sun coming through the glass

ANSWER: c

POINTS: 1

25. In the sentence *they serve as vehicles for artistic expression* in paragraph H, they refers to _____.
- a. items of clothing from people like Alexander McQueen
 - b. Rei Kawakubo and Comme des Garçons
 - c. mass-produced uniforms

ANSWER: a

POINTS: 1

26. The author thinks the concept of art should not be limited to the dictionary definition because _____.
- a. the viewer is the most important person in the artistic process
 - b. the historical definition of art was different
 - c. art should not be limited to paintings and statues

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

27. In a concept map of this passage, what would be the best title for the box with the note “organic forms”?
- a. Fashion
 - b. Architecture
 - c. Prehistoric Art

ANSWER: b

POINTS: 1

28. Which of these would be a good subtopic under the box of a concept map entitled “Avant Garde Fashion”?
- a. Clothes that aren’t necessarily easy to wear.
 - b. Clothes that last for only a season.
 - c. Clothes that fit the shape of the human body.

ANSWER: a

POINTS: 1

Rewrite each sentence. Correct the mistake(s) with a relative clause.

29. Annie Griffiths is a photographer which work I really admire.

ANSWER: Annie Griffiths is a photographer whose work I really admire.

POINTS: 1

30. Vermeer who painted *Girl with a Pearl Earring* lived in the 17th century.

ANSWER: Vermeer, who painted *Girl with a Pearl Earring*, lived in the 17th century.

POINTS: 1

LEVEL 4 Assessment Answer Key

31. My friend recently bought a camera that it cost over \$1,000.

ANSWER: My friend recently bought a camera that cost over \$1,000.

POINTS: 1

32. I don't think I've ever been to the gallery, where the exhibition will take place.

ANSWER: I don't think I've ever been to the gallery where the exhibition will take place.

POINTS: 1

33. The art school which was established in the early 20th century is renowned for its rigorous curriculum and talented students.

ANSWER: The art school, which was established in the early 20th century, is renowned for its rigorous curriculum and talented students.

POINTS: 1

34. The Renaissance is a period, when there was a significant shift from medieval traditions, to a more realistic style.

ANSWER: The Renaissance is a period when there was a significant shift from medieval traditions to a more realistic style.

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the thesis statement for an essay. Decide if each sentence supports the thesis statement or not. Choose *Yes* or *No*.

"Schools should fund art programs for all students as part of compulsory education."

35. Art programs play a crucial role in fostering creativity and critical thinking, which are essential skills for students to succeed in a rapidly evolving and competitive world.

a. Yes
b. No

ANSWER: a

POINTS: 1

36. Funding art programs for all students as part of compulsory education may divert valuable resources from other critical subjects that are essential for preparing students for practical, real-world challenges.

a. Yes
b. No

ANSWER: b

POINTS: 1

37. Studies have shown that students who participate in art programs demonstrate improved academic performance and increased engagement in other subjects.

a. Yes
b. No

ANSWER: a

POINTS: 1

38. While art programs can be beneficial for some students, they may not appeal to everyone, leading to disengagement and even resistance from students who do not have a natural interest or talent in the arts.

a. Yes
b. No

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

39. By investing in art programs, schools can contribute to the preservation of cultural heritage and encourage cultural diversity, enriching society as a whole.
- a. Yes
 - b. No

ANSWER: a

POINTS: 1

Read each topic sentence. Decide which is the stronger supporting sentence. Choose the correct option.

40. The use of natural light enhances the beauty of outdoor photography.
- a. Natural light provides a soft, flattering glow that adds depth and dimension to landscapes and portraits.
 - b. Sunlight can create overexposed areas, cast shadows, and make it challenging to capture the desired mood.

ANSWER: a

POINTS: 1

41. Black and white photography conveys a timeless and emotive quality.
- a. These days monochrome photography is making a comeback.
 - b. It evokes a sense of nostalgia and elicits a more profound emotional response from the viewer.

ANSWER: b

POINTS: 1

42. Photography serves as a powerful tool for storytelling.
- a. Nothing beats moving images for being able to convey the details of a narrative.
 - b. Pictures are invaluable in journalism, documentary work, and social advocacy.

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

43. Creative use of composition is the key to producing compelling photographs.
- a. By carefully arranging the elements within the frame, photographers can guide the viewer's eye to the key image.
 - b. By skillful use of preset mathematical formulas, the photographer can guarantee a response.

ANSWER: a

POINTS: 1

44. "Migrant Mother," a photograph captured by Dorothea Lange during the Great Depression, is a powerful portrayal of human resilience and the harsh realities faced by migrant workers.
- a. In the photograph, the worn-out appearance of the mother and her children encapsulates the hardships endured by countless families during that era.
 - b. Dorothea Lange is also famous for her pictures of migrant workers and evacuees during the war.

ANSWER: a

POINTS: 1

UNIT 4: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. The _____ of the old railway line into a bike path has proven very popular with tourists.
- a. capacity
 - b. committee
 - c. conversion

ANSWER: c

POINTS: 1

2. First class travel caters to _____ passengers who are able to pay more for better service and greater comfort.
- a. elite
 - b. excessive
 - c. competitive

ANSWER: a

POINTS: 1

3. The mayor _____ people to avoid driving during peak hours unless it was absolutely necessary.
- a. swapped
 - b. urged
 - c. caught on

ANSWER: b

POINTS: 1

4. The transportation _____ met to decide what the most urgent upgrades needed were in the city's public transit system.
- a. committee
 - b. dilemma
 - c. aviation

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

5. Choosing between a more affordable but longer train journey and a faster but pricier flight is a(n) _____ faced by many people.
- conversion
 - dilemma
 - advocate

ANSWER: b

POINTS: 1

Complete the sentences with the correct words.

advocates	capacity	competitive	disruption	excessive
-----------	----------	-------------	------------	-----------

6. Airlines offer _____ prices during off-peak travel seasons to attract more passengers.
7. The invention of self-driving cars may be the biggest _____ to the automotive industry in years.
8. The outdated subway system didn't have the _____ to deal with increasing passenger numbers.
9. The _____ use of private vehicles contributes to high levels of pollution in the city.
10. Public transportation _____ call for more investment in train and bus transit systems.

ANSWERS: 6. competitive, 7. disruption, 8. capacity, 9. excessive, 10. advocates

POINTS: 5

Complete the sentences with the noun or adjective form of the verb.

correct	destroy	instruct
---------	---------	----------

11. You need to make a few small _____ to your essay, but otherwise, it's great!

LEVEL 4 Assessment Answer Key

12. The _____ caused many of the coastal roads by the hurricane cut off access to several towns.

13. I enjoyed your lecture. It was really _____.

ANSWERS: 11. corrections, 12. destruction, 13. instructive

POINTS: 3

Choose the correct word to complete each sentence.

14. The garage _____ the woman another vehicle to use while her car was being repaired.

- a. lent
- b. borrowed

ANSWER: a

POINTS: 1

15. The _____ generated by the new monorail was used to improve wheelchair access at all stations.

- a. revenue
- b. expenditure

ANSWER: a

POINTS: 1

16. The company outperformed its rivals, selling twice as many units as its closest _____.

- a. partner
- b. competitor

ANSWER: b

POINTS: 1

Read the passage.

GREEN AIR TRAVEL By Sam Howe Verhovek

Can the aviation industry re-invent itself to make flying less harmful to the environment?

A At Airbus headquarters in the south of France, there is a flying machine made of composite materials resembling no airliner that has ever taken to the skies, at least outside of science fiction movies or UFO sightings. The plane, known as Maveric, is a model aircraft with a 3.2-meter wingspan. For Airbus,

LEVEL 4 Assessment Answer Key

Maveric's design could hold the answer to this intriguing question: Is there a more efficient—greener—way to design an airliner?

- B** For all kinds of reasons, the modern aircraft manufacturing industry does not easily lend itself to the disruption that can so suddenly upend conventional thinking in other industries. A true game changer of an airliner will take many, many years to develop and more years to weather the gauntlet of safety tests involved in certification for commercial service.
- C** Yet the so-called blended wing body design employed by Maveric—although with major technical challenges to overcome—could yield as much as a 40 percent reduction in carbon emissions compared with today's planes. The main advantage of the streamlined design is that the entire aircraft functions much like a wing, reducing drag and making it much easier to generate lift. In the Netherlands, researchers at the Delft University of Technology used similar principles in designing Flying-V, an aircraft that looks very much like a boomerang.
- D** In 2020, Airbus went a step further and created a major stir in the industry by announcing it was working on a line of aircraft with a stunning capability: zero-emission flight. A Maveric variant and two smaller tube-and-wing airliners, it said, would operate on hydrogen fuel. The main by-product? Water vapor.
- E** As is true with electric automobiles, zero emission doesn't necessarily mean zero pollution. Just as it matters where the electricity comes from to charge the car's battery, Airbus's approach begs the question of how to create and store hydrogen fuel.
- F** Most hydrogen used today comes from fossil fuels. But so-called green hydrogen, in which clean electricity is used to separate water into hydrogen and oxygen, is the holy grail. Advocates say that technological progress and scaling up will bring green hydrogen its day in the sky.
- G** In the central California farm town of Hollister, a stubby banana-yellow aerial vehicle with 13 rotors whirls around. It has no pilot.
- H** The self-flying electric plane may be an oddity today, but its inventors expect it to be a commonplace feature of tomorrow—the aerial taxi. As more than one evangelist for the urban air mobility industry puts it, "Think: Uber meets Tesla in the sky."
- I** Their company, called Wisk, is just one of many aspiring entrants, although with major chops: It has financial backing from Boeing and Kitty Hawk, the aviation start-up founded by Google's Larry Page. Its vision is a world in which taking a flying taxi will be as easy and affordable as an automobile ride is today—and safer to boot.
- J** "This is not the Wild West," Gary Gysin, Wisk's chief executive, tells me when I visit the company's hangar. "We will absolutely meet the incredibly stringent safety standards already set for the aviation industry. We have to—nobody's flying anywhere until the FAA (the Federal Aviation Administration) says so."
- K** Just when this particular industry might take off is, well, up in the air. Gysin says the industry likely will start by shuttling people among airports and "vertiports," which might be a landing pad atop a Manhattan apartment building, or a parking lot in a Los Angeles suburb.

LEVEL 4 Assessment Answer Key

- L** Just how strong a public backlash to the idea of air taxis there might be is hard to say. But electric-powered flight, while still severely limited by battery weight and capacity, is happening on another front. One intriguing approach is in British Columbia, Canada, where a commuter seaplane operator is retrofitting its workhorse fleet of 60-year-old de Havilland Beavers and Otters, swapping out gas-fired piston engines for electric motors.
- M** Greg McDougall, Harbour Air's founder and chief executive, piloted the December 2019 initial test run on the first such plane. "We're proud to be the first airline in the world to offer completely clean electric flight, fueled by our province's sustainable hydropower," McDougall tells me. "But I'm not doing this just because I'm some wild-eyed environmentalist hippie. I am a businessman. This is going to lower my costs, which is going to lower the cost of everyone's tickets."

Choose the correct answers.

17. How can the Maveric positively impact the environment?
- a. It is made with materials that are greener than traditional airplanes.
 - b. Its design means it uses less fuel than traditional airplanes.
 - c. It doesn't need a large airport to land on, unlike traditional airplanes.

ANSWER: b

POINTS: 1

18. In paragraph B, the phrase *lend itself* in the first sentence is closest in meaning to _____.
- a. add quality to
 - b. to give for a short time
 - c. be well-suited to

ANSWER: c

POINTS: 1

19. What is Airbus's approach to making flying less harmful to the environment?
- a. They are working on a lightweight plane that uses less fuel.
 - b. They are building planes that release less pollution.
 - c. They are trying to develop a fuel made from water vapor.

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

20. A vertiport can be best described as _____.
- a. an electric vehicle capable of flying
 - b. a type of electric motor
 - c. a place for aerial taxis to land

ANSWER: c

POINTS: 1

21. Why is Greg McDougall most interested in electric flight?
- a. He wants to make more money by lowering costs.
 - b. He wants his company to be the first airline to build electric planes.
 - c. He wants to make creative use of his 60-year-old planes.

ANSWER: a

POINTS: 1

Read the passage.**Are Electric Cars Really Better than Internal Combustion Cars?**

- A** The global automotive landscape is currently undergoing a monumental transformation as electric cars gain popularity. This surge in interest has sparked a heated debate: are electric vehicles (EVs) truly superior to their internal combustion engine (ICE) counterparts? Do EVs truly live up to their hype, and do they possess the necessary qualities to outperform and outsell traditional combustion engine cars? To answer these questions, we need to look at three main areas: environmental impact, convenience, and cost.
- B** Proponents of EVs proudly assert that electric cars are the greener choice. This is supported by the fact that EVs produce zero emissions while being driven, giving them what appears to be a clear advantage in terms of environmental friendliness. The decision to replace your old gasoline-powered car with a new electric vehicle may therefore seem like a simple and logical choice. However, there are other factors to consider.
- C** Let's dig deeper into the environmental impact of electric cars. While EVs do not emit greenhouse gases directly, they aren't exactly carbon neutral as most of the electricity used to power EVs still comes from fossil fuels in most countries. The good news though is that this will change as countries continue to transition away from fossil fuels to greener sources of electricity, such as wind and solar. More concerning though is the impact battery manufacturing is having on the world. Battery manufacturing is a resource- and energy-intensive process. In addition, the mining of the materials needed to make batteries such as lithium and cobalt often leads to severe environmental damage.
- D** Another more pragmatic consideration when assessing the viability of EVs is convenience. While advertisements might portray EVs as hassle-free alternatives capable of effortlessly gliding along all sorts of terrains, the reality is that most people planning a long road trip in an EV would probably have to do a

LEVEL 4 Assessment Answer Key

fair amount of research before embarking on their journey. This is because there are still far fewer electric charging stations than there are gasoline stations—even in countries that are actively pushing to promote EVs. As such, range anxiety is a very real concern for EV drivers. This refers to the fear of running out of battery power before reaching a charging station—particularly during long journeys. This is not really a concern for drivers of ICE vehicles, since the refueling infrastructure for these vehicles is well established.

- E** While the number of charging stations will inevitably rise as EVs gain popularity, range anxiety and the lack of charging stations are only half the problem. The amount of time required to charge an EV is also an issue since charging is considerably slower than filling up at a gas station. While fast-charging stations have done an impressive job closing that gap, it still takes about 15 minutes for just a small partial charge. And there is a downside to fast charging, too, which has been shown to degrade batteries more quickly. Although most people will simply charge their EVs at home overnight while they sleep, the need to spontaneously charge up while on the move will always remain. Many doubt that charging a car in these situations will ever get much quicker than it currently is.
- F** The final factor to consider when comparing electric cars to ICE cars is cost. EV advocates will be quick to cite lower fuel and maintenance costs per mile. EVs are definitely much more energy efficient than ICE vehicles, and because they use simpler electric motors instead of complex internal combustion engines, they're also less prone to wear and tear and easier to maintain. However, EVs are also considerably more expensive to buy. Furthermore, replacing an EV's battery can also be extremely costly. This remains a significant barrier for many consumers, even with government incentives available in many countries. Additionally, while combustion engine cars have well-established repair and maintenance infrastructure, EVs currently lack the same level of customer support. This could drive up the cost of repairs for EV owners.
- G** So, are electric cars really better than traditional ICE vehicles? The answer for now remains uncertain. The comparison between EVs and ICE cars goes beyond emissions alone; it requires a comprehensive assessment of overall environmental impact, user convenience, and cost. While factors like convenience and cost may seem trivial in the face of a climate emergency, they do matter. If EVs are indeed the green alternative to ICE vehicles, they need to be practical and affordable to the masses. With time, EVs will no doubt continue to improve in all areas. However, at present, more needs to be done to elevate EV and battery technology to the required level.

Choose *True*, *False* or *Not Given*.

22. The amount of pollution emitted by electric cars while they are moving is zero.
- True
 - False
 - Not Given

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

23. The author believes that EVs are more convenient than ICE cars.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

24. There is some environmental damage caused by the production of wind and solar energy.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

25. *Range anxiety* is the concern about the length of time it takes to charge an electric car.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

26. EVs generally need to be repaired less often than ICE vehicles.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each paragraph. Decide if the author is leaning *for* or *against* the use of drones.

27. Advocates of drones highlight their capacity to completely change industries such as agriculture, where they can be used to assess crop health and apply targeted treatments to small areas, reducing the need for excessive chemical use. However, the increased reliance on drones also stirs concerns about job displacement in the farming industry. On top of that, the integration of drones into farming is not yet effectively regulated. Drone technology is developing too fast for effective guidelines regulating their safe use and responsible implementation to be put in place.

- a. For
- b. Against

ANSWER: b

POINTS: 1

28. There are significant concerns about the safety of drones that do need careful consideration. But it has to be said that drones hold immense promise for search and rescue operations, as their ability to go into challenging locations and provide real-time images can aid in locating missing individuals swiftly. Beyond these applications, drones also show potential in the delivery sector, in urban areas and remote regions alike, which could enhance efficiency and reduce traffic congestion.

- a. For
- b. Against

ANSWER: a

POINTS: 1

Choose the correct answer to complete each sentence.

29. _____ warnings of heavy winds and poor visibility, the helicopter pilot decided to take off.
- a. Without
 - b. Unless
 - c. Despite

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

30. _____ “the Northern lights” by many, the aurora borealis can be seen not just from the ground, but from the windows of an airplane in flight.
- a. Called
 - b. Called it
 - c. It was called

ANSWER: a

POINTS: 1

31. _____ the fact that air travel is becoming so expensive, passenger numbers are falling.
- a. Why?
 - b. Because
 - c. On account of

ANSWER: c

POINTS: 1

32. _____ end of the 20th century, low-cost airlines had taken almost 25% of the market share.
- a. The
 - b. When
 - c. By the

ANSWER: c

POINTS: 1

33. _____ crossed by a balloon in 1785, thousands of people have tried crossing the English channel by air.
- a. Since it was first
 - b. First it was
 - c. First

ANSWER: a

POINTS: 1

34. Made from renewable waste resources, _____.
- a. it has a very small carbon footprint
 - b. smaller carbon footprint is made
 - c. and a small carbon footprint

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each paragraph from an essay comparing cars and trains. Decide if it belongs in an essay using the *block* or *point-by-point* method.

35. Cars are known for their convenience. They offer flexibility, allowing people to go wherever they want, whenever. They also provide a sense of autonomy and can be particularly useful in areas with limited public transportation. However, this convenience can be offset by traffic congestion, parking difficulties, and the stress of driving—especially in crowded urban environments.

- a. block method
- b. point-by-point method

ANSWER: a

POINTS: 1

36. In urban areas, cars are certainly more comfortable, insulating people from the noise outside and separating them from the crowds. However, they are susceptible to traffic congestion, especially during peak hours. Trains do not experience congestion. However, they can be less comfortable. In many cities, they are often packed full during peak hours.

- a. block method
- b. point-by-point method

ANSWER: b

POINTS: 1

Read the paragraph from an essay comparing cars and bicycles. Decide if it belongs in an essay using the *block* or *point-by-point* method.

37. Unlike cars, bicycles help cities reduce air pollution as well as decrease noise levels. They are space efficient, requiring much less road and space for parking. Moreover, their manufacture causes minimal ecological damage when compared to other forms of transportation. However, they can be less convenient, especially for longer journeys, and when commuting in hot weather.

- a. block method
- b. point-by-point method

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each paragraph from an essay comparing cars and trains. Decide if it belongs in an essay using the *block* or *point-by-point* method.

38. Cars tend to be the costliest way to commute, both in terms of initial investment as well as recurring expenses. Trains, however, are much more cost-effective for the commuter. These positions are reversed when considering the infrastructure investment required. Train networks are much more expensive to build than roads, and require much more maintenance, too. Fortunately, train fares cover a significant portion of these initial and recurring costs.

- a. block method
- b. point-by-point method

ANSWER: b

POINTS: 1

39. While trains do vary in terms of how eco-friendly they are, electric trains produce no direct emissions and have the potential to utilize renewable energy sources. They are by far the most energy-efficient mode of powered transportation, especially when compared to cars and planes. "Maglev" trains—ones that make use of magnets to float above their tracks—are even more efficient, and have the added bonus of being able to move at speeds of hundreds of kilometers per hour. While these systems can be expensive to build, they are actually quite cheap to run, and are great for long-distance journeys across land.

- a. block method
- b. point-by-point method

ANSWER: a

POINTS: 1

Complete the sentences with the correct words.

however	instead of	the other hand	unlike	whereas
---------	------------	----------------	--------	---------

40. _____ train systems—which often cost a lot to build—buses require minimal infrastructure investment as they mostly just use existing roads.
41. Claire decided to walk to work _____ driving to get some exercise.
42. The older trains run on diesel fuel, _____ the high-speed bullet trains are electric powered.

LEVEL 4 Assessment Answer Key

43. Bicycles are the most eco-friendly option. _____, electric cars are also a sustainable choice.
44. I like the trains because they generally run on time and experience very few delays. On _____, they can get really crowded.

ANSWERS: 40. unlike, 41. instead of, 42. whereas, 43. however, 44. the other hand

POINTS: 5

UNIT 5: ADDITIONAL QUESTIONS**Complete the sentences with the correct words.**

capability	complexity	realistically	simulation	swarm
------------	------------	---------------	------------	-------

1. A _____ of insects destroyed the farmer's whole field of crops in just a few hours.
2. The _____ of the challenge didn't deter the team. They were determined to complete the task.
3. The engineers ran a _____ to test the effectiveness of the aircraft's new design.
4. We need to build a team that has the _____ to complete this project on time.
5. The scientist built a robot bee that moved so _____ that birds would try to eat it.

ANSWERS: 1. swarm, 2. complexity, 3. simulation, 4. capability, 5. realistically

POINTS: 5

Choose the correct word to complete each sentence.

6. The dancers moved in perfect harmony, their movements _____ to the rhythm of the music.
 - a. synchronized
 - b. solitary
 - c. anonymous

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

7. The aurora borealis, a natural light display in the northern skies, is a breathtaking natural _____.
a. phenomenon
b. swarm
c. capability

ANSWER: a

POINTS: 1

8. The five employees chose to remain _____ when they made their complaint about the conditions in the factory.
a. solitary
b. anonymous
c. synchronized

ANSWER: b

POINTS: 1

9. The engineering team used a computer _____ to test the strength and durability of the new bridge design before construction began.
a. phenomenon
b. simulation
c. swarm

ANSWER: b

POINTS: 1

10. With determination and hard work, Jane was able to _____ her goal of running her first half marathon only six months after she started training.
a. accomplish
b. imitate
c. coordinate

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Match the words to the sentences.

- | | | |
|---|---|------------------|
| 11. To save space, they decided to _____ the two small rooms into one larger and more functional workspace. | ● | ● a. collaborate |
| 12. The rescue team had to _____ their efforts with other agencies to efficiently respond to the natural disaster. | ● | ● b. coordinate |
| 13. The two companies decided to _____ on a research project to explore innovative solutions to environmental challenges. | ● | ● c. combine |

ANSWERS: 11. c, 12. b, 13. a

POINTS: 3

Choose the correct word to complete each sentence.

14. The researchers _____ the environmental conditions to see how this would affect the behavior of the swarm.
- a. manipulated
 - b. manipulation

ANSWER: a

POINTS: 1

15. Everyone said the success of the gala was down to the seamless _____ skills of the event planner.
- a. coordinate
 - b. coordination

ANSWER: b

POINTS: 1

16. Students at medical school go through hundreds of hours of medical _____ before they are allowed to deal with real patients.
- a. simulated
 - b. simulations

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the passage.**The Smart Swarm (by Peter Miller)**

The study of swarms is providing insights that can help humans manage complex systems.

- A** How do the simple actions of individuals add up to the complex behavior of a group? How do hundreds of honeybees make a critical decision about their hive if many of them disagree? What enables a school of herring to coordinate its movements so precisely it can change direction in a flash—like a single, silvery organism? The answer has to do with a remarkable phenomenon I call the smart swarm.
- B** In nature, of course, animals travel in large numbers. That's because, as members of a big group, whether it's a flock, school, or herd, individuals increase their chances of detecting predators, finding food, locating a mate, or following a migration route. For these animals, coordinating their movements with one another can be a matter of life or death.
- C** "It's much harder for a predator to avoid being spotted by a thousand fish than it is to avoid being spotted by one," says Daniel Grünbaum, a biologist at the University of Washington. "News that a predator is approaching spreads quickly through a school because fish sense from their neighbors that something's going on."
- D** When a predator strikes a school of fish, the group is capable of scattering in patterns that make it almost impossible to track any individual. It might explode in a flash, create a kind of moving bubble around the predator, or fracture into multiple blobs, before coming back together and swimming away.
- E** That's the wonderful appeal of swarm intelligence. Whether we're talking about ants, bees, pigeons, or caribou, the ingredients of smart group behavior—decentralized control, response to local cues, simple rules of thumb—add up to a shrewd strategy to cope with complexity.
- F** "We don't even know yet what else we can do with this," says Eric Bonabeau, a complexity theorist and the chief scientist at Icosystem Corporation in Cambridge, Massachusetts. "We're not used to solving decentralized problems in a decentralized way. We can't control an emergent phenomenon like traffic by putting stop signs and lights everywhere. But the idea of shaping traffic as a self-organizing system, that's very exciting."
- G** The internet is already using a form of swarm intelligence. Consider the way Google uses group smarts to find what you're looking for. When you type in a search query, Google surveys billions of Web pages on its index servers to identify the most relevant ones. One of the way it ranks the search results is by the number of pages that link to them, counting links as votes (the most popular sites get weighted votes since they're more likely to be reliable). The pages that receive more votes are listed higher in the search results. In this way, Google says, it "uses the collective intelligence of the Web to determine a page's importance."
- H** Wikipedia, a free collaborative encyclopedia, has also proved to be a big success, with millions of articles in more than 200 languages about everything under the sun, each of which can be contributed by anyone or edited by anyone. "It's now possible for huge numbers of people to think together in ways we never imagined a few decades ago," says Thomas Malone of MIT's Center for Collective Intelligence. "No single

LEVEL 4 Assessment Answer Key

person knows everything that's needed to deal with problems we face as a society, such as health care or climate change, but collectively we know far more than we've been able to tap so far."

- I Such thoughts underline an important truth about collective intelligence: crowds tend to be wise only if individual members act responsibly and make their own decisions. A group won't be smart if its members imitate one another, slavishly follow fads, or wait for someone to tell them what to do. When a group is being intelligent, whether it's made up of ants or attorneys, it relies on its members to do their own part. For those of us who sometimes wonder if it's really worth recycling that extra bottle to lighten our impact on the planet, the bottom line is that our actions matter, even if we don't see how.

Choose the correct answers.

17. What does Eric Bonabeau say about swarm intelligence?
- a. It has no real-world applications for humans.
 - b. We haven't yet figured out how to apply it properly.
 - c. It's not of much use when it comes to managing traffic.
 - d. To apply it properly, we need a more centralized approach.

ANSWER: b

POINTS: 1

18. What is NOT given in the article as a reason that animals often travel in packs?
- a. social bonding
 - b. avoiding predators
 - c. finding a partner
 - d. searching for sustenance

ANSWER: a

POINTS: 1

19. The word *fracture* in paragraph D is closest in meaning to _____.
- a. swim away
 - b. try to fight
 - c. break apart
 - d. form a bubble

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

20. In paragraph H, Wikipedia is given as an example of _____.
- a. collective intelligence on the internet
 - b. a good source of information about smart swarms
 - c. a website created by Thomas Malone
 - d. the disadvantages of collective intelligence

ANSWER: a

POINTS: 1

21. According to the author, for a group to be considered smart, its individual members must _____.
- a. follow the leader's orders
 - b. copy one another
 - c. follow trends
 - d. act responsibly

ANSWER: d

POINTS: 1

Read the passage.

Serotonin: The Swarm Maker (by Ed Yong)

- A** Serotonin is a chemical with many functions. It carries messages between the cells of the brain, and in doing so, controls everything from anger to sleep, body temperature, and appetite. But for one species of insect, serotonin is also the cause of some of the most destructive swarm behavior found on this planet. It is the chemical responsible for turning solitary desert locusts into massive, destructive plagues.
- B** Locust swarms have been known to destroy food crops across huge areas of land, causing entire populations to go hungry. The desert locust is especially known for causing this sort of destruction. A single swarm can spread over thousands of square kilometers, with each locust able to eat its own weight in plants every day. Desert locusts can be found in about 60 countries throughout Africa, the Middle East, and Asia. They are thought to threaten the lives of around a tenth of the world's human population. However, there is another side to the desert locust. For most of their lives, they actually live alone, avoiding other locusts. So what causes them to change their behavior so drastically?
- C** During dry spells, solitary locusts are forced to gather in the few areas of land with remaining vegetation. Their numbers increase to the point of overcrowding, and that flicks a chemical switch in them that changes their bodies and behavior. In as little as two hours, the solitary, green locusts transform into the extremely sociable yellow or red versions of themselves. When the rains return and food becomes more abundant, the now sociable locusts reproduce rapidly. This increases their numbers even more, resulting in huge hungry swarms that are sometimes several billion strong.

LEVEL 4 Assessment Answer Key

- D** The transformation that happens within each locust is a complicated one. It involves over 500 genes and is triggered by the presence of other locusts close by. Most of these details were discovered by Stephen Simpson at the University of Oxford and Malcolm Burrows at Cambridge. They found that the change that happens in locusts boils down to a single choice—to stay alone or move together—and that choice is controlled by serotonin. This single chemical is capable of causing the change all on its own, and without it, the locusts won't transform. Put more scientifically, it is necessary and sufficient for bringing out the sociable side of locusts.
- E** In a previous study, Simpson and Burrows found that the locust's change is caused by a short but intense increase in serotonin in the locusts' nerves. Through new research, two members of their labs, Michael Anstey and Steve Rogers, also discovered that the more serotonin they found in the locusts, the more sociable they were. To prove this, Anstey and Rogers created groups of different locusts with varying levels of sociable behavior. The most sociable locusts were found to have three times as much serotonin as the ones that lived alone.
- F** In nature, there are generally two different ways in which the transformation in locusts can be triggered. The first is simply by sight or smell, and the second is by physical contact, when the sensitive hairs on the locusts' legs touch other locusts. The different types of stimuli affect the locusts in very different ways, but both ultimately increase their serotonin levels and their social behavior. Anstey and Rogers found that they could also trigger the transformation by simply applying serotonin directly onto a locust. But perhaps more importantly, they discovered that there were ways to prevent the locusts from becoming sociable. They could inject the insects with either chemicals that prevented the serotonin from taking effect, or that stopped the locusts from producing the chemical in the first place.
- G** It is not clear what keeps a locust sociable once the transformation has taken place. The serotonin spikes locusts experience are only temporary, and after living together for a while, the sociable locusts actually have lower serotonin levels than individuals living alone. Anstey and Rogers believe that the serotonin spike starts a long-term program of gene activation and transformation. Furthermore, prolonged crowding firmly ingrains sociable behavior in the locust's brain and body. Essentially, new memories are formed.
- H** Unfortunately, it is unlikely that any of these discoveries will help us control actual locust swarms, at least in the near future. Since serotonin only kickstarts social behavior, any anti-serotonin chemicals would have to be used while the locusts live alone, and at that point, locusts live too far apart to be targeted effectively—about three per 100 square meters of desert. Serotonin is also common in the rest of the animal world, so chemicals that target it run a heavy risk of negatively affecting other species. To avoid that, any drug produced would have to be designed to affect only locusts. As of now, we don't have that ability.

LEVEL 4 Assessment Answer Key

Choose *True, False* or *Not Given*.

22. Desert locusts are the most common type of locust.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

23. Simpson and Burrows have done a number of studies on desert locusts.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

24. The fastest way to increase serotonin levels in locusts is to stimulate their back legs.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

25. Once the locusts' serotonin levels have dropped, they become solitary creatures again.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

26. Using chemicals to affect serotonin levels in wild locusts is dangerous because it could also affect other animals.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the correct answers.

27. Choose the option that best paraphrases this sentence:

"Their numbers increase to the point of overcrowding, and that flicks a chemical switch in them that changes their bodies and behavior."

- a. Their population grows and the area gets too crowded, resulting in a chemical change that alters their biologies and how they act.
- b. They grow and can no longer live in the same area, which affects their moods and physiologies, causing a chemical change.
- c. Injecting them with chemicals was found to increase both their size and the speed at which the insects' transformation occurred.

ANSWER: a

POINTS: 1

28. Choose the option that best paraphrases this sentence:

"The serotonin spikes locusts experience are only temporary, and after living together for a while, the sociable locusts actually have lower serotonin levels than individuals living alone."

- a. Serotonin helps locusts develop sharp spikes that eventually grow smaller once they start living alone again.
- b. The locusts' serotonin levels do not stay high permanently, and after a while, they have even less serotonin than locusts that live in solitude.
- c. After a long time, locusts that live alone eventually show an increase in their serotonin levels.

ANSWER: b

POINTS: 1

Read each sentence. Choose the best synonym for the underlined words.

29. The serotonin spike is just temporary and after many generations of living in a group, the locusts actually have lower levels of serotonin than even individuals that live in solitude.

- a. chemical compound
- b. sudden increase
- c. negative effect

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

30. Serotonin is also widely used in the animal world, so chemicals that mess with it run a heavy risk of negatively affecting other species.

- a. increase
- b. produce
- c. affect

ANSWER: c

POINTS: 1

31. Anstey and Rogers believe that the initial surge kick-starts a long-term program of gene activation.

- a. irritates
- b. initiates
- c. imitates

ANSWER: b

POINTS: 1

32. It relays messages between the cells of the brain, and, in doing so, controls everything from anger to sleep, body temperature, and appetite.

- a. creates
- b. controls
- c. carries

ANSWER: c

POINTS: 1

33. It is the chemical responsible for turning solitary desert locusts into massive, destructive plagues.

- a. huge
- b. multiple
- c. moderate

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

34. But if they injected the insects with chemicals that block the work of serotonin or prevent the insect from making it, no amount of leg-stroking or locust-watching would trigger the change.
- a. activate
 - b. prevent
 - c. hide

ANSWER: a

POINTS: 1

Read the extract from *The Smart Swarm*.

The Smart Swarm

The internet is already using a form of swarm intelligence. Consider the way Google uses group smarts to find what you're looking for. When you type in a search query, Google surveys billions of Web pages on its index servers to identify the most relevant ones. One of the ways it ranks the search results is by the number of pages that link to them, counting links as votes (the most popular sites get weighted votes since they're more likely to be reliable). The pages that receive more votes are listed higher in the search results. In this way, Google says, it "uses the collective intelligence of the Web to determine a page's importance."

Complete the summary with the correct words.

analyzes	assess	importance	internet	utilize
----------	--------	------------	----------	---------

35. Websites like Google already _____ swarm intelligence. When a user performs a search, Google _____ billions of web pages to find those that are most relevant. The pages are then ranked and listed in order of the number of other pages that link to them: extra _____ is given to sites with more links. In doing this, Google believes that it is able to _____ a page's significance by using the collective intelligence of the _____.

ANSWERS: utilize, analyzes, importance, assess, internet

POINTS: 5

LEVEL 4 Assessment Answer Key

Read the passage.**Serotonin: The Swarm Maker (by Ed Yong)**

- A** Serotonin is a chemical with many functions. It carries messages between the cells of the brain, and in doing so, controls everything from anger to sleep, body temperature, and appetite. But for one species of insect, serotonin is also the cause of some of the most destructive swarm behavior found on this planet. It is the chemical responsible for turning solitary desert locusts into massive, destructive plagues.
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- D** The transformation that happens within each locust is a complicated one. It involves over 500 genes and is triggered by the presence of other locusts close by. Most of these details were discovered by Stephen Simpson at the University of Oxford and Malcolm Burrows at Cambridge. They found that the change that happens in locusts boils down to a single choice—to stay alone or move together—and that choice is controlled by serotonin. This single chemical is capable of causing the change all on its own, and without it, the locusts won't transform. Put more scientifically, it is necessary and sufficient for bringing out the sociable side of locusts.
- E** In a previous study, Simpson and Burrows found that the locust's change is caused by a short but intense increase in serotonin in the locusts' nerves. Through new research, two members of their labs, Michael Anstey and Steve Rogers, also discovered that the more serotonin they found in the locusts, the more sociable they were. To prove this, Anstey and Rogers created groups of different locusts with varying levels of sociable behavior. The most sociable locusts were found to have three times as much serotonin as the ones that lived alone.
- F** In nature, there are generally two different ways in which the transformation in locusts can be triggered. The first is simply by sight or smell, and the second is by physical contact, when the sensitive hairs on the locusts' legs touch other locusts. The different types of stimuli affect the locusts in very different ways, but both ultimately increase their serotonin levels and their social behavior. Anstey and Rogers found that they could also trigger the transformation by simply applying serotonin directly onto a locust. But perhaps more importantly, they discovered that there were ways to prevent the locusts from becoming sociable.

LEVEL 4 Assessment Answer Key

They could inject the insects with either chemicals that prevented the serotonin from taking effect, or that stopped the locusts from producing the chemical in the first place.

- G** It is not clear what keeps a locust sociable once the transformation has taken place. The serotonin spikes locusts experience are only temporary, and after living together for a while, the sociable locusts actually have lower serotonin levels than individuals living alone. Anstey and Rogers believe that the serotonin spike starts a long-term program of gene activation and transformation. Furthermore, prolonged crowding firmly ingrains sociable behavior in the locust's brain and body. Essentially, new memories are formed.
- H** Unfortunately, it is unlikely that any of these discoveries will help us control actual locust swarms, at least in the near future. Since serotonin only kickstarts social behavior, any anti-serotonin chemicals would have to be used while the locusts live alone, and at that point, locusts live too far apart to be targeted effectively—about three per 100 square meters of desert. Serotonin is also common in the rest of the animal world, so chemicals that target it run a heavy risk of negatively affecting other species. To avoid that, any drug produced would have to be designed to affect only locusts. As of now, we don't have that ability.

The paragraphs below do not summarize well the paragraphs of the reading passage. Match them with the reasons (1–5) they are NOT good summaries.

1. It doesn't paraphrase the original sufficiently.
2. It misrepresents the original.
3. It doesn't contain enough key information.
4. It is longer than the original.
5. It uses incorrect synonyms.

36. **Paragraph A:** _____

The passage covers how serotonin affects humans and locusts differently.

ANSWER: 2

POINTS: 1

37. **Paragraph B:** _____

Locust swarms are known to destroy crops across huge areas of land, causing entire populations to go hungry. The desert locust is especially known for causing this level of destruction. A single swarm can spread over thousands of kilometers, and each locust is able to eat its weight in plants every day.

Desert locusts can be found in about 60 countries around the world, and threaten the lives of about one-tenth of the world's humans.

ANSWER: 1

POINTS: 1

LEVEL 4 Assessment Answer Key

38. **Paragraph C:** _____

Locusts alter their behavior during dry spells, during which typically solitary locusts are forced to gather in the few areas that still have plants left to feed on. This results in overcrowding, which triggers a transformation in the insects' physiologies and lifestyles. The solitary locusts quickly become sociable, changing their colors from green to yellow or red. This change can happen in just a few hours. The situation is made worse when the dry spell ends. Food becomes abundant, allowing the overcrowded locusts to start reproducing. This results in even more overcrowding, and as the vegetation continues to return, the cycle repeats and the locust numbers increase exponentially. This can lead to extremely large, destructive swarms containing billions of locusts.

ANSWER: 4

POINTS: 1

39. **Paragraph D/E:** _____

Simpson and Burrows discovered that the chemical causing the change could be triggered by sight, smell, or contact. Anstey and Rogers also found that certain other chemicals blocked its effects, while others stopped the insects from producing it.

ANSWER: 3

POINTS: 1

40. **Paragraph H:** _____

These inventions will probably not allow us to supervise locust swarms anytime soon as any anti-serotonin chemicals would have to be used on solitary locusts that are too sprinkled to be steered effectively. Furthermore, the chemicals would likely influence other species since serotonin is common in animals. It might be possible though to one day develop a drug that affects only locusts.

ANSWER: 5

POINTS: 1

UNITS 1–5: ADDITIONAL QUESTIONS

Match each word to its definition.

- | | | |
|---------------------|---|--|
| 1. repetitive (adj) | ● | ● a. to cause a process to begin |
| 2. counterpart (n) | ● | ● b. something or someone that has a similar function in a different place |
| 3. trigger (v) | ● | ● c. the interruption or disturbing of a process |
| 4. disruption (n) | ● | ● d. to organize different things so they work together well |
| 5. coordinate (v) | ● | ● e. involving the same action being done many times |

ANSWERS: 1. e, 2. b, 3. a, 4. c, 5. d

POINTS: 5

Complete each sentence with the correct word from the box.

accelerating	capability	catching on	habitat	imply
--------------	------------	-------------	---------	-------

6. Increasingly powerful technology is _____ changes in our working environment.
7. As cities continue to grow and expand outwards, there is bound to be an impact on the _____ of the surrounding wildlife.
8. In his talk, Marvin seemed to _____ that our standard office design needs to be completely rethought.
9. The idea of making cities more pedestrian friendly is _____ in many parts of the world.
10. AI can already produce some interesting art, and its _____ will only increase in years to come.

ANSWERS: 6. accelerating, 7. habitat, 8. imply, 9. catching on, 10. capability

POINTS: 5

LEVEL 4 Assessment Answer Key

Choose the correct word to complete each sentence.

11. Although scientists have tried for many years, the reality of being able to give someone a total artificial _____ still seems many years away. The real organ is still the only long-term option.
- a. heart
 - b. limb
 - c. intelligence

ANSWER: a

POINTS: 1

12. Before we started work on the project, there was a period of training to _____ ourselves with the main concepts.
- a. generalize
 - b. generalization
 - c. familiarize
 - d. visualization

ANSWER: c

POINTS: 1

13. We plan to wait till we hear back from our negotiating partners. We are confident there will be a _____ soon.
- a. counterattack
 - b. counteroffer

ANSWER: b

POINTS: 1

14. Rob is highly creative, but his ideas are often not viable. Aya is always practical, so she provides an excellent _____.
- a. counterbalance
 - b. counterpart

ANSWER: a

POINTS: 1

15. What you just said sounds _____ to me—could you please clarify what you mean?
- a. ambivalent
 - b. ambiguous

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

16. I think he's very clever, but he isn't as motivated as some of the other candidates. I'm rather _____ about him.
- a. ambidextrous
 - b. ambivalent

ANSWER: b

POINTS: 1

17. The barriers to becoming a photographer are low—we all have cameras. As a result, it is an extremely _____ field.
- a. competition
 - b. competitive

ANSWER: b

POINTS: 1

18. If you want to succeed in management, you will have to become a better _____ maker. You can't afford to be unsure.
- a. decision
 - b. decisive

ANSWER: a

POINTS: 1

19. With this software, we can accurately _____ how a large flock of birds would behave when approached by a predator.
- a. coordination
 - b. coordinate
 - c. simulation
 - d. simulate

ANSWER: d

POINTS: 1

20. After the final interviews, the four interviewers sat down to thoroughly _____ each of the shortlisted candidates.
- a. communicate
 - b. coordination
 - c. evaluate
 - d. imitate

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the passage.**A Woman in Science**

- A** Born in London to Nigerian parents, Dr Maggie Aderin-Pocock is a British space scientist. She is also an inventor, educator, author, and TV presenter. From when she was a very young child, she loved the night sky and was fascinated by space. At a young age, she learned about early astronauts like Yuri Gagarin, the first human to enter space, and Neil Armstrong, the first person to walk on the Moon. Her childhood dream was to become an astronaut. Growing up in London, which like all big cities suffers from light pollution, meant it was difficult to see the stars, but she was not deterred. She saved up to buy a telescope, and even learned how to improve it by attending a telescope-making class.
- B** At school, she faced educational challenges. She was diagnosed with dyslexia, which is a condition that makes it hard to read and write. She moved between 13 different schools as she struggled to overcome her reading and writing difficulties. Despite this, she was a successful student, going on to study physics at Imperial College London, and subsequently gaining a PhD in mechanical engineering.
- C** Aderin-Pocock explains that her experience working in the physical sciences as a black woman has been interesting. For example, people sometimes assumed that she was an admin staff member, rather than a PhD student. As a result, she felt pressure to show her skills and abilities and excel in what she did. Now, as an older woman, she believes that her minority status has given her an advantage by allowing her to stand out from the crowd.
- D** One of Aderin-Pocock's skills is her ability to turn a complex idea into something more accessible. This is something she has made excellent use of in her role as a science communicator. One of her passions is to encourage young people to consider a career in science. To that end, she has given talks to more than 350,000 schoolchildren in the U.K. and elsewhere. In these talks, she encourages the students to have big dreams—she calls it the “Desire to Aspire.”
- E** In 2009, she was given an MBE—a British award for outstanding achievements or services—for her contributions to science and education. A decade later, she won the 2019 *Women of the Year* award for innovation. She has designed optical equipment for the James Webb Space Telescope and has been a regular presenter of the BBC's program *The Sky at Night*, a popular and long-running show that examines cutting-edge space science and the universe. Aderin-Pocock is also a successful author. Her books include *Dr Maggie's Grand Tour of the Solar System* and *The Book of the Moon*.
- F** Aderin-Pocock believes that although women still face challenges in the workplace, things have improved. For example, women are less underestimated than before, especially in the sciences. Nonetheless, barriers still exist, and while some of these are societal, many are, according to Aderin-Pocock, internal. By this, she means that women are often limited by their own attitudes regarding what they are capable of. Breaking down these internal obstacles is vital, she points out, as is removing social biases that still exist against women in the workplace.
- G** Good quality education is of course essential for a successful career, and in many countries, this is still not available to girls. Aderin-Pocock explains that, in her view, if this could be changed, it could transform

LEVEL 4 Assessment Answer Key

many women's lives for the better. She also believes that it is important to get a greater number of women into the sciences. While there is very good representation in some fields of science, such as medicine and biology, she points out that in subjects like physics, computing, and engineering, the proportion of women is sometimes as low as 20 percent. Jobs in such fields can provide good salaries, so this would also have the effect of decreasing the pay gap between men and women. Furthermore, getting both women and men into these jobs would help solve the labor shortage these fields currently experience and encourage further development.

- H** When asked what advice Aderin-Pocock would give young women today, she says that they should “dream big and aim high, and have the confidence to know that they can achieve the dream.” This is clearly something that Aderin-Pocock herself has done, and with great success. Now, she is doing all she can to help future generations of scientists, both female and male, realize their potential.

Read each statement and choose *True* or *False*.

21. The text is mainly about Dr Maggie Aderin-Pocock's highly successful career in the field of space science.
- a. True
 - b. False

ANSWER: a

POINTS: 1

22. Dr Maggie Aderin-Pocock believes that women in the workplace today face less discrimination than before.
- a. True
 - b. False

ANSWER: a

POINTS: 1

Choose the correct answers.

23. What is NOT described as one of Dr Aderin-Pocock's skills or strengths?
- a. her ability to explain complicated things in a way that is easy to understand
 - b. her ability to solve complex mathematical problems

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

24. What is true about the fields of physics, computing, and engineering?
- They suffer from a lack of people working in them.
 - They tend to pay lower salaries than average.

ANSWER: a

POINTS: 1

25. What does the text say Dr Aderin-Pocock thinks about some young women?
- She believes that some young women lack self-confidence and ambition.
 - She thinks that some young women believe they can achieve success without hard work.

ANSWER: a

POINTS: 1

Read the extract from the passage. Then choose the correct answer.

26. Good quality education is of course essential for a successful career, and in many countries, this is still not available to girls.

What does the underlined word refer to?

- a successful career
- a good quality education

ANSWER: a

POINTS: 1

Match the ideas with the correct paragraph.

- | | | |
|-----------------|---|--|
| 27. Paragraph B | ● | ● a. how her success has been recognized |
| 28. Paragraph C | ● | ● b. the impact of her being a minority in her field |
| 29. Paragraph E | ● | ● c. her feelings about being a woman in the workplace |
| 30. Paragraph F | ● | ● d. her difficulties and triumphs in school |

ANSWERS: 27. d, 28. b, 29. a, 30. c

POINTS: 4

LEVEL 4 Assessment Answer Key

Read the extract. Choose the best definition of the underlined phrase.

31. Now, as an older woman, she believes that her minority status has given her an advantage by allowing her to stand out from the crowd.

- a. to take advantage of having different qualities
- b. to be different in some way and so be easy to notice

ANSWER: b

POINTS: 1

Read the extract. Then choose the best answer to the question.

32. Nonetheless, barriers still exist, and while some of these are societal, many are, according to Aderin-Pocock, internal. By this, she means that women are often limited by their own attitudes regarding what they are capable of. Breaking down these internal obstacles is vital, she points out, as is removing social biases that still exist against women in the workplace.

What is stated as vital in the text?

- a. Removing the internal and societal obstacles that women face.
- b. Changing the attitudes women have regarding hard work.

ANSWER: a

POINTS: 1

Choose the correct answer to complete each sentence.

33. The field of robotics is advancing rapidly. As _____ become more intelligent, they will come to perform an ever-increasing number of roles.

- a. robots
- b. robotics

ANSWER: a

POINTS: 1

34. Many people are optimistic about the future of green transportation. I share that _____, and look forward to a greener way of traveling.

- a. optimist
- b. optimism

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the correct appositive to complete each sentence.

a city of about 9 million people	the presence of people from different ethnic and cultural backgrounds
----------------------------------	---

35. Diversity— _____
—can be one of the metrics used to evaluate cities.
36. London, _____, is
one of the most diverse cities in the world.

ANSWERS: 35. the presence of people from different ethnic and cultural backgrounds,

36. a city of about 9 million people

POINTS: 2

Choose the correct word to complete each sentence.

37. Picasso's Blue Period, between 1901 and 1904, was a time _____ he painted mostly in blue or blue-green.
- a. that
 - b. when
 - c. where

ANSWER: b

POINTS: 1

38. The AI-powered language model ChatGPT, _____ is now being used by millions of people around the world, is rapidly changing the way we work.
- a. who
 - b. that
 - c. which

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the sentence. Type the initial phrase to complete the sentence with the same meaning.

39. Elena decided to enroll in a photography course after attending an art and photography exhibition last month.

Elena decided to enroll in a photography course.

ANSWER: After attending an art and photography exhibition last month

POINTS: 1

Choose the best synonym for each underlined word.

40. Using state-of-the-art technology to help design a more efficient office is an intriguing idea.
- a. original
 - b. interesting
 - c. frightening

ANSWER: b

POINTS: 1

41. As climate change increasingly disrupts our lifestyles, more and more people are becoming strong advocates of public transportation.
- a. supporters
 - b. defenders
 - c. users

ANSWER: a

POINTS: 1

Read the prompt. Then write a problem-solution essay.

42. Consider some of the challenges facing the natural environment (animals facing extinction, rising sea levels, global warming, etc).
Choose one and propose either:
- two solutions to the problem.
 - one solution to the problem, and two reasons.

LEVEL 4 Assessment Answer Key

A. OUTLINE

Plan an outline for your essay.

Write notes for your introduction. Include background information and a thesis statement.

Write notes for your first body paragraph. Include a topic sentence and key details.

Write notes for your second body paragraph. Include a topic sentence and key details.

Write notes for your conclusion. Restate your thesis statement, and summarize your main supporting ideas.

LEVEL 4 Assessment Answer Key

B. Think of some words and phrases you can use in your essay. Write them in the box.

The words and phrases below can be useful when writing about conservation.

- *destroy, destruction, damage, face, threaten*
- *problem, challenge, solution*
- *environmental, wildlife*
- *deforestation, global warming, sea level rise*
- *irreversible, vast, serious*

C. Write your essay based on your outline. Use the model to help you. Remember to use the vocabulary you wrote down.**Model:**

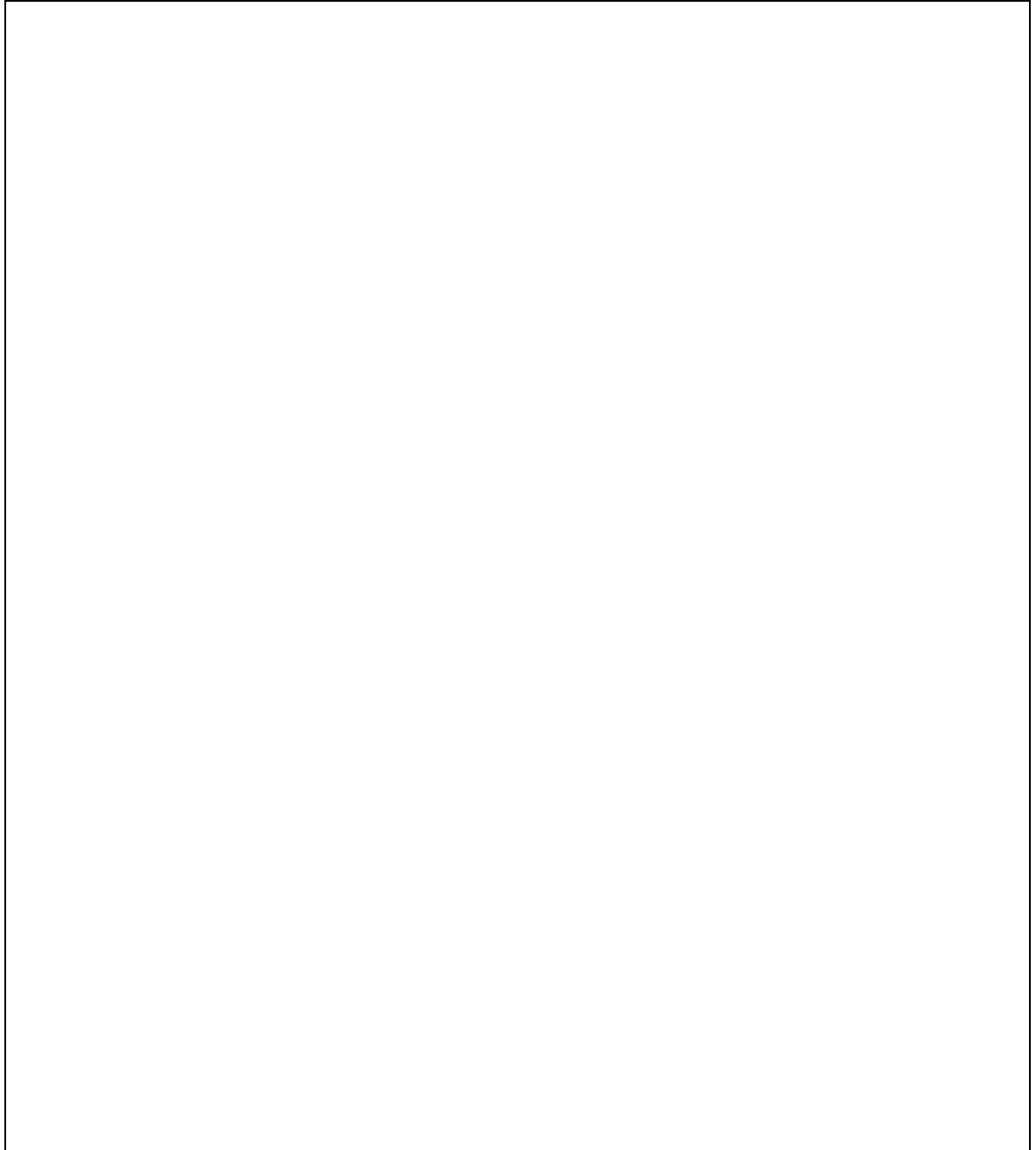
Every second, close to 500 trees are chopped down in forests around the world. Deforestation is a serious problem that will impact us all if we do nothing to slow it down or stop it. Fortunately, there are things we can do as individuals that can make a difference: we can choose sustainable products, and we can reduce the number of things we buy.

We can collectively reduce deforestation by choosing to buy products that are certified as sustainable. Forests are often cleared to obtain the materials we need to manufacture many of the things we buy every day. Some companies, however, choose to source their materials in less destructive ways. Products made using these sustainable materials often come with a label or some sort of certification. As consumers, we should choose these eco-friendly options over their less environmentally-friendly counterparts as often as possible—even if they do cost a little bit more.

We must also go one step further by buying fewer things in the first place. There are 8 billion people on this planet, and the number of non-essential items that we buy—and oftentimes throw away after just a few uses—is staggering. It's not just the resources needed to make these things that are a concern. The space needed to dispose of them is problematic, too. Space needs to be created for landfills, and often, this is done at the expense of natural environments and forests. By reducing the number of things we buy, we reduce the burden we place on the planet.

LEVEL 4 Assessment Answer Key

Our forests are precious, but because of deforestation, we run the risk of losing them forever. Fortunately, we can play our part to combat deforestation by choosing sustainable options and by simply buying less. Our consumption takes a toll on the planet. So the next time you're about to buy a T-shirt that you'll probably only wear once, stop and ask yourself: Do I really need it?



ANSWER: Answers will vary. See Writing Rubric.

POINTS: 12

UNIT 6: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. He was afraid of heights, so looking down from the top of the tall building filled him with intense

_____.

- a. scrutiny
- b. imitation
- c. dread

ANSWER: c

POINTS: 1

2. The warmth and _____ of the locals quickly dispelled all feelings of worry, making the experience truly enjoyable.

- a. horizon
- b. hospitality
- c. paradigm

ANSWER: b

POINTS: 1

3. The TV documentary provided a rare _____ of the language and culture of the little-known tribe.

- a. scrutiny
- b. glimpse
- c. horizon

ANSWER: b

POINTS: 1

4. While language barriers and cultural differences can be a _____ in cross-cultural interactions, they also present valuable opportunities for growth.

- a. texture
- b. glimpse
- c. limitation

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

5. Some concepts are rather _____ and hard to explain in a simple way.
- abstract
 - coherent
 - random

ANSWER: a

POINTS: 1

Complete the sentences with the correct words.

coherent	horizon	random	scrutiny	stereotypes
----------	---------	--------	----------	-------------

6. As language learning progresses, your linguistic _____ expands, enabling you to understand a wider range of topics.
7. He spoke in a way that wasn't really _____, but they were able to understand him anyway because of the gestures he used.
8. The tax proposal came under intense _____ after the news story uncovered several glaring loopholes.
9. The things he says can be so _____ and unrelated to whatever it is everyone else is talking about.
10. Interacting with people from different backgrounds can help you to break _____ you may hold.

ANSWERS: 6. horizon, 7. coherent, 8. scrutiny, 9. random, 10. stereotypes

POINTS: 5

Choose the option that better describes each word in bold.

11. She **glanced** at the phrase book to remind herself of some useful phrases for ordering food.
- looked briefly
 - looked for a long time

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

12. The woman **glared** at the passenger who bumped into her getting on the train.
- looked briefly
 - looked for a long time

ANSWER: b

POINTS: 1

13. He **scrutinized** the photograph but didn't recognize any of the people in it.
- looked briefly
 - looked for a long time

ANSWER: b

POINTS: 1

Complete the sentences with the correct words.

a dark cloud on the	beyond the	broaden your
---------------------	------------	--------------

14. Despite all the speculation surrounding the merger, it's hard to tell what lies _____ horizon.
15. The managers left the meeting looking rather anxious. I'm not sure what they talked about, but I see _____ horizon.
16. Learning a new language will _____ horizons and allow you to connect with cultures very different from your own.

ANSWERS: 14. beyond the, 15. a dark cloud on the, 16. broaden your

POINTS: 3

Read the passage.

Is Joy the same in every language? (by Jen Rose Smith)

Why Words Matter

A When learning a new language, students have been known to paste tiny vocabulary stickers all over the house, turning furniture into memory-jogging flash cards. But if words are just labels, why does it matter how we refer to emotions?

LEVEL 4 Assessment Answer Key

- B** Some researchers believe that words can subtly shape the way we see the world. One such researcher is neuroscientist Kristen Lindquist at the University of North Carolina, who has found that the words we use play an important role in turning experiences into recognizable emotions. She described the process as a kind of categorization, like slipping an experience into a mental filing cabinet.
- C** “The brain automatically and implicitly engages in categorization all the time,” Lindquist says. As an example, she describes the desktop display on her computer, which has a photo of a mountain on it. Tiny pixels of light beam out at her from the screen, and her brain uses categories acquired through experience—she’s seen plenty of mountains—to interpret the image. Without such categories, which rely on language, the display would be just a random smattering of color.
- D** “That’s the process by which any emotional experience is coming into being,” she says. “The concepts that we know, especially for categories such as emotion, which are really abstract categories, are supported in large part by the language that we speak.”
- E** Using a theory called psychological constructionism, Lindquist explains how an emotion, such as joy, might arise. First comes a constellation of thoughts, sights, smells, and other experiences. Your brain uses existing categories, she says, to sort those incoming sensations into something you can make sense of.
- F** Peer inside each of those categories, and you’ll find impressive variety, Lindquist says. Feelings can be fuzzy, free-floating, and hard to define, but words help group them into something more coherent. “Language serves as the glue,” she says.

The Power of Language Learning

- G** Learning a new language might start to make that glue more flexible. “There are all sorts of differences in terms of how finely you break down your categories,” says Aneta Pavlenko, a linguist at the University of Oslo. Pavlenko argues that becoming bilingual or multilingual can restructure those categories, expanding the ways we conceive of emotions.
- H** “Maybe you see things as a single type of anger, but now you need to see them as three or four different varieties,” she says. The same goes for joy, delight, or even love. Pavlenko warns that simply picking up some flash cards won’t reshuffle your brain’s emotional categories. To do that, you need to put the new vocabulary to use, preferably in a situation where you’re sure to talk about feelings.
- I** But even if you’re not making cross-cultural small talk in Tagalog or Urdu, language study can still be a mind-expanding experience, says Lomas. While poring over a map isn’t the same as actually exploring the nooks and crannies of an unfamiliar landscape, it does hint at the shape of things—just as learning new words gives a glimpse of just how expansive the world of emotions can be.
- J** “It’s trying to appreciate how people live and experience life,” Lomas says. “And I think words can do that.”

LEVEL 4 Assessment Answer Key

Choose *True, False* or *Not Given*.

17. Language plays a crucial role in shaping our understanding and experience of emotion.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

18. Labeling items is a more effective way to learn new words than using flashcards.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

19. English has fewer words for emotions than most other languages.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

20. Learning two or more languages allows you to experience a more diverse range of emotions.

- a. True
- b. False
- c. Not Given

ANSWER: a

POINTS: 1

21. Learning new words in another language is just as effective at helping you form new categories as practicing that language.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the passage.**The Foreign Language Effect**

- A** It has long been accepted that learning a second language does for your brain what using weights does for your body—it keeps it healthier for longer. Research has shown that people who know more than one language can delay the onset of age-related diseases like dementia for up to 5 years. Recent studies, however, suggest that learning a second language might be responsible for an even more dramatic change in how the brain functions.
- B** First documented by Boaz Keysar and his colleagues at the University of Chicago in 2012, measurable changes were seen in the brains of subjects when they were performing tasks in a second language compared to performing the same tasks in their native language—changes which influenced rational decision-making and even risk-taking behavior. This became known as the Foreign Language Effect (FLE). In subsequent years, FLE has been proven again and again in a number of different studies.
- C** In Keysar’s original experiment, a group of native English speakers who were studying Spanish as a second language were split into two groups and given the same moral problem: would you kill one person to save five others? Most of the group who were given the problem in their native language said no, but the ones who were given the problem in their second language were more likely to consider both sides rationally. Keysar repeated the experiment a number of times and kept getting the same results—when thinking and speaking in their native language, people were too emotional to even consider killing a person to save five people. However, when thinking and speaking in their second language, they were more logical about their choice.
- D** Over the years, this problem has been posed again and again to people of different nationalities with different native languages and different second languages, with similar results: people are less likely to make decisions based on emotion if they make that decision in a second language. Our first language is like a massive emotional dog dragging us around the park in all sorts of random directions, whereas our second language is a small, well-behaved puppy that we are fully in control of.
- E** In 2013, Albert Costa, building on Keysar’s experiments regarding FLE and financial choices, found that people were less susceptible to the framing effect in a second language. The framing effect occurs when people react differently depending on whether information is presented as positive or negative. For example, a person is more likely to bet money if you tell them they have a 50% chance of winning, and less likely if you tell them they have a 50% chance of losing, even though those odds are exactly the same. However, when you give them equivalent information in a second language, they are much less likely to be influenced by the positive or negative words used to frame the question. It’s as if the second language acts like a net, sorting the facts from the sales pitch.
- F** And the range of behaviors affected by FLE doesn’t stop there. Researchers in China in 2021 found that people tend to lie less in a second language than in their native language. In 2022, psychologists in Poland found that people were less egotistical in a second language than their native tongue. People who normally tend to think they are above average in decision making skills are much more willing to admit

LEVEL 4 Assessment Answer Key

they might be wrong when operating in their second language. Keysar himself has continued his studies in this field and has found that people have more accurate memories in a second language.

- G** So what causes FLE? One theory has to do with cognitive load, or the increased amount of brain power needed to speak in a second language. It takes you longer to think, so you have more time to consider decisions rather than react emotionally. This might also explain why people are more honest when using their second language: it is simply more difficult to make up information when speaking in a different language. Another theory is that people often learn their second language in classrooms from books. This is a less emotional environment.
- H** One of the most convincing theories relates to the area of the brain that is used for languages. When we turn thoughts into speech in our native tongue, we use a part of the brain known as Broca's area in the lower portion of the left frontal lobe. We also use Wernicke's area, which is usually behind the ear on the opposite side of the dominant writing hand, to make sense of words that we hear. However, when people switch to their second language, a third area of the brain also lights up under an MRI scan: the CEO of the brain, the prefrontal cortex. The prefrontal cortex, which is located directly behind your forehead, just so happens to be the area responsible for rational decision-making and repressing reactions based on instinct.

Choose the correct answers.

22. In Keysar's first study into FLE, participants were asked to _____.
a. make a decision based on emotion
b. make a simple financial decision
c. make a difficult moral choice

ANSWER: c

POINTS: 1

23. According to the passage, Polish psychologists found that people _____ in a second language.
a. more willingly accept that they are wrong
b. are less able to lie effectively
c. have more accurate memories

ANSWER: a

POINTS: 1

24. What does the author feel best explains the foreign language effect?
a. the controlled conditions in which we learn a second language
b. the amount of time it takes to process information in a second language
c. the part of the brain used when speaking a second language

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

25. What part of the brain is activated when we are speaking our first language?
- a. an area just behind the eye
 - b. the lower part of the left frontal lobe
 - c. the upper part of the right frontal lobe

ANSWER: b

POINTS: 1

26. In the phrase *dominant writing hand* in the middle of paragraph **G**, the word *dominant* is closest in meaning to?
- a. superior
 - b. influential
 - c. preferred

ANSWER: c

POINTS: 1

Read the quote from the passage. Choose *Simile*, *Metaphor*, or *Analogy*.

27. "... the second language acts like a net, sorting the facts from the sales pitch."

- a. Simile
- b. Metaphor
- c. Analogy

ANSWER: a

POINTS: 1

28. "Our first language is like a massive emotional dog dragging us around the park in all sorts of random directions ..."

- a. Simile
- b. Metaphor
- c. Analogy

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the correct form to complete each verbal phrase.

29. _____ snowshoes allows a person to walk on snow without sinking into it.

- a. Wore
- b. To wear
- c. Wearing

ANSWER: c

POINTS: 1

30. _____ during the colonial period, this diary provides an excellent record of life during that era.

- a. Written
- b. To write
- c. Writing

ANSWER: a

POINTS: 1

31. He walked home, _____ if he had made the right decision.

- a. wondered
- b. to wonder
- c. wondering

ANSWER: c

POINTS: 1

32. _____ my literature exam, I need a score of at least 70%.

- a. Passed
- b. To pass
- c. Passing

ANSWER: b

POINTS: 1

33. _____ over a period of 12 years, 2014's *Boyhood* depicts the childhood and adolescence of Mason Evans Jr.

- a. Filmed
- b. To film
- c. Filming

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

34. _____ a second language is recognized as a way to lower the risk of developing dementia or memory problems in old age.
- a. Learned
 - b. To learn
 - c. Learning

ANSWER: c

POINTS: 1

Identify the features in the introduction and conclusion of an essay. Write the correct letter (A–E) next to each feature in the paragraphs.

- 35.
- | | |
|----------|---|
| A | summary of the main supporting points |
| B | interesting quotation/introduction to the topic |
| C | final thought |
| D | restatement of thesis |
| E | thesis statement |

Essay topic: *In what ways are ants and honeybees similar in terms of their social behavior?*

Introduction

Both honeybees and ants are social insects that live in groups called colonies. They survive by means of their collective intelligence. Their decision-making power is distributed throughout the group; that is, no one ant or bee makes decisions for the group. Instead, they work together. As Deborah M. Gordon, a biologist at Stanford University, says, "Ants aren't smart. Ant colonies are." The same is true for bee colonies. _____

Although bees and ants are quite different physically, they have a lot in common in terms of their social behavior. Specifically, honeybees and ants have similar roles within the colony, both have communication systems, and both have the capacity for learning. _____

Conclusion

As we can see, the social behavior of honeybees and ants is quite similar. _____

LEVEL 4 Assessment Answer Key

Both coordinate complex actions and survive by assuming similar roles, employing complex communication systems, and learning when confronted by new stimuli. _____

Unintelligent as they may be as individuals, as groups, both species often show collective brilliance as they go about their everyday activities. _____

ANSWERS: B, E, D, A, C

POINTS: 5

Read each sentence. Identify the type of error in the sentence. Choose the correct answer.

36. Growing up in a bilingual household, learned a lot about how low-context and high-context languages differ.

- a. missing comma
- b. unnecessary comma
- c. no subject after verbal phrase

ANSWER: c

POINTS: 1

37. Using language learning apps that included a gaming element I started having fun expanding my vocabulary.

- a. missing comma
- b. unnecessary comma
- c. no subject after verbal phrase

ANSWER: a

POINTS: 1

38. Worrying about sounding silly, is one of the main reasons school students hesitate to use the tone and rhythm of their second language.

- a. missing comma
- b. unnecessary comma
- c. no subject after verbal phrase

LEVEL 4 Assessment Answer Key

ANSWER: b

POINTS: 1

39. Learning a language that doesn't use the Roman alphabet, would probably be a lot harder for me.

- a. missing comma
- b. unnecessary comma
- c. no subject after verbal phrase

ANSWER: b

POINTS: 1

40. Making basic mistakes almost daily I found it difficult to notice any improvement in my communication skills.

- a. missing comma
- b. unnecessary comma
- c. no subject after verbal phrase

ANSWER: a

POINTS: 1

UNIT 7: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. Many people _____ cities with noise, traffic, and pollution, but not all cities are like that.
 - a. associate
 - b. undergo
 - c. thrive

ANSWER: a

POINTS: 1

2. Many problems that can easily be prevented _____ from bad urban planning.
 - a. thrive
 - b. arise
 - c. resemble

ANSWER: b

POINTS: 1

3. Despite the central government's efforts to stamp out _____, pockets of criminality still persist in all areas of local politics.
 - a. corruption
 - b. mining
 - c. misfortune

ANSWER: a

POINTS: 1

4. We should distribute the tasks evenly among the team members to avoid putting the entire _____ on one person.
 - a. corruption
 - b. misfortune
 - c. burden

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

5. His political views _____ a radical transformation after he spent months backpacking around the poorer towns and villages of his country.
- arose
 - underwent
 - resembled

ANSWER: b

POINTS: 1

Complete the sentences with the correct words.

distinct	dominant	misfortune	radical	sole
----------	----------	------------	---------	------

6. She suffered great _____ during her life, but she always remained positive despite everything.
7. The flavor of the Japanese citrus fruit yuzu is quite _____. It doesn't taste like the lemons or limes commonly found in the U.S.
8. You'll have access to a team of freelancers, but _____ responsibility for completing this project lies with you.
9. The researchers asked participants to use their weaker hand instead of their _____ hand to complete a list of tasks.
10. Although it seems normal now, allowing staff to work from home in the early 2000s was considered a _____ business practice.

ANSWERS: 6. misfortune, 7. distinct, 8. sole, 9. dominant, 10. radical

POINTS: 5

LEVEL 4 Assessment Answer Key

Match the words to the sentences.

- | | | |
|---|---|--------------|
| 11. We don't expect things to change too much. We've had a _____ economy for several years now. | ● | ● a. stable |
| 12. In a _____ economy, consumer spending slows down, which can lead to higher unemployment. | ● | ● b. booming |
| 13. Taking advantage of the _____ economy, the company invested its extra capital on expanding its warehouse. | ● | ● c. weak |

ANSWERS: 11. a, 12. c, 13. b

POINTS: 3

Complete the sentences with the correct words.

advantage	difference	pattern
-----------	------------	---------

14. Their innovative technology gave them a distinct _____ over their competitors.
15. They're talking about the two theories as if they're exactly the same, but there is a distinct _____ between them.
16. According to economists, there is a distinct _____ of growth associated with more women entering the workforce.

ANSWERS: 14. advantage, 15. difference, 16. pattern

POINTS: 3

Read the passage.

The Shape of Africa (by Jared Diamond)

A Ironically, the long human presence in Africa is probably the reason the continent's species of big animals survive today. African animals coevolved with humans for millions of years, as human hunting prowess gradually progressed from the basic skills of our early ancestors. That gave the animals time to learn a healthy fear of man and, with it, a healthy avoidance of human hunters. In contrast, North and South America and Australia were settled by humans only within the last tens of thousands of years. To the

LEVEL 4 Assessment Answer Key

misfortune of the big animals of those continents, the first humans they encountered were already fully modern people, with modern brains and hunting skills. Most of those animals—woolly mammoths, saber-toothed cats, and, in Australia, marsupials as big as rhinoceroses—disappeared soon after humans arrived. Entire species may have been exterminated before they had time to learn to be wary of hunters.

- B** Unfortunately, the long human presence in Africa also encouraged something else to thrive—diseases. The continent has a well-deserved reputation for having spawned some of our nastiest ones: malaria, yellow fever, East African sleeping sickness, and AIDS. These and many other human illnesses arose when microbes causing disease in animals crossed species lines to evolve into a human disease. For a microbe already adapted to one species, to adapt to another can be difficult and require a lot of evolutionary time. Much more time has been available in Africa, cradle of humankind, than in any other part of the planet. That's half the answer to Africa's disease burden; the other half is that the animal species most closely related to humans—those whose microbes required the least adaptation to jump species—are the African great apes and monkeys.
- C** Africa continues to be shaped in other ways by its long history and its geography. Of mainland Africa's ten richest countries, eight lie partly or entirely within its temperate zones: Egypt, Libya, Tunisia, and Algeria in the north; and Angola, South Africa, Botswana, and Namibia in the south. Gabon and Equatorial Guinea are Africa's only tropical countries to make the list. In addition, nearly a third of the countries of mainland Africa (15 out of 47) are landlocked, and the only African river navigable from the ocean for long distances inland is the Nile. Since waterways provide the cheapest way to transport cumbersome goods, geography again thwarts Africa's progress.
- D** All these factors can lead to the question: "Is the continent, or at least its big tropical core, doomed eternally to wars, poverty, and devastating diseases?" I'd answer, "Absolutely not." On my own visits to Africa, I've been struck by how harmoniously ethnic groups live together in many countries—far better than they do in many other parts of the globe. Tensions arise in Africa, as they do elsewhere, when people see no other way out of poverty except to fight their neighbors for dwindling resources. But many areas of Africa have an abundance of resources: The rivers of central Africa are great generators of hydroelectric power; the big animals are a major source of ecotourism revenue in eastern and southern Africa; and the forests in the wetter regions, if managed and logged sustainably, would be renewable and lucrative sources of income.
- E** As for Africa's health problems, they can be greatly alleviated with the right planning and funding. Within the past half century, several formerly poor countries in Asia recognized that tropical diseases were a major drain on their economies. By investing in public health measures, they have successfully curbed those diseases, and the increased health of their people has led to far healthier economies. Within Africa itself, some international mining and oil companies have been funding successful public health programs throughout their concession areas because they realized that protecting the health of their workers was an excellent business investment for them.
- F** What's the best case for Africa's future? If the continent can overcome its health problems and the corruption that plagues many of its governments and institutions, then it could take advantage of today's

LEVEL 4 Assessment Answer Key

globalized, technological world in much the same way that China and India are now doing. Technology could give Africa the connections that its geography, particularly its rivers, long denied it. Nearly half of all African countries are English speaking—an advantage in trade relations—and an educated, English-speaking workforce could well attract service jobs to many African countries.

- G** If Africa is to head into a bright future, outside investment will continue to be needed, at least for a time. The cost of perpetual aid to or military intervention in Africa is thousands of times more expensive than solving its health problems and supporting local development, thereby heading off conflicts. The entire world will be healthier and safer if Africa's nations increasingly take their places as peaceful and prospering members of the world community.

Choose the correct answers.

17. What is the main idea of this passage?
- a. The geography and history of Africa has affected its development.
 - b. Tropical diseases have been an enormous drain on Africa's economy.
 - c. Investments in Africa may halt conflicts and help development.
 - d. Government corruption is the most pressing reason for Africa's problems.

ANSWER: a

POINTS: 1

18. According to the passage, what is the reason that many serious diseases emerge from Africa?
- a. There are more microbes found in Africa's warmer climates.
 - b. Humans in Africa have lived alongside animals, especially apes, for a long time.
 - c. The cause is not known.
 - d. Animals in Africa have had time to develop a healthy fear of humans.

ANSWER: b

POINTS: 1

19. According to paragraph C, which of the following is true?
- a. Of Africa's ten richest countries, none are from the tropical region.
 - b. Most countries in Africa have no coastline.
 - c. Most of Africa's ten richest countries are in the north of the continent.
 - d. Most of the more prosperous countries are in Africa's temperate zones.

ANSWER: d

POINTS: 1

LEVEL 4 Assessment Answer Key

20. According to the passage, which of the industries has invested in public health in Africa?

- a. education
- b. technology
- c. mining
- d. military

ANSWER: c

POINTS: 1

21. The phrase *heading off* in paragraph **G** is closest in meaning to _____.

- a. forcing
- b. departing
- c. redirecting
- d. preventing

ANSWER: d

POINTS: 1

Read the passage.**How Cape Town Avoided Day Zero**

Despite being surrounded by two oceans, Cape Town—South Africa’s oldest city—suffered one of the worst periods of drought in its history in the years 2017 and 2018. Population growth and three dry winters in a row, perhaps brought about by climate change, resulted in one of the world's most dramatic urban water crises. The situation was so bad that by the end of 2017, city leaders had started preparing for Day Zero—the day that the city would run out of water.

The impact a water shutdown would have on a city of 4.6 million is hard to imagine. The economic cost to businesses, the health cost to people with no access to clean water, and the disruption to daily life are almost unthinkable—especially in a wealthy city like Cape Town, a town that had won several international water management awards. The problem for Cape Town was that it had relied almost solely on rainfall to keep its dams full. This strategy worked most of the time: In 2014, the city’s six major dams were full. However, just three dry years later, they were only at 21% of capacity.

Fortunately, through a combination of community efforts, water-efficient practices, and forward-thinking engineering solutions, Cape Town not only averted Day Zero but also set an example for the world on how to manage water resources sustainably.

One of the foundations of Cape Town's successful response to the water crisis was its comprehensive and transparent public communication strategy. Recognizing the importance of keeping the public informed, city officials ran a campaign to educate residents about the severity of the situation and the urgent need for water conservation. Guidelines on how to reduce water consumption and daily updates on water level targets were

LEVEL 4 Assessment Answer Key

announced on social media, traditional media outlets, and other public channels. This proactive approach created a sense of shared responsibility among citizens, motivating them to alter their behavior and do their part to save water.

The crisis also forced Cape Town's residents, businesses, and institutions to adopt water-efficient practices that have since become embedded in the city's culture. Individuals stopped thinking of water as something that was freely available and learned to value it as a precious resource. They implemented small changes, such as taking shorter showers, using laundry water for gardening, and buying water-saving appliances. Cape Town's agricultural sector also underwent a similar transformation. It adopted more efficient farming methods and switched to crops that required less water to grow.

Finally, in order to avoid Day Zero, Cape Town also adopted a range of innovative engineering solutions. One of the most notable examples was the use of desalination plants and water recycling systems. Desalination—the process of removing salt from water—allowed the city to produce clean, drinking water by purifying seawater. Similarly, water recycling systems treated wastewater so that it could be used for farming and industrial processes, reducing the burden on the city's freshwater supply. These initiatives did not just provide Cape Town with a range of alternative water sources; they demonstrated the city's willingness to embrace cutting-edge solutions to tackle the problem.

Today, Cape Town is not just sitting back and relaxing even though the crisis is over. The city has new plans to unearth additional drinking water by mining deep underground. It also plans to install state-of-the-art water meters in homes and factories to measure exactly how much water is being used at any one time. Plants and vegetation that are not native to South Africa, and which use a lot of water, are being cleared near rivers and lakes.

While the cost of avoiding Day Zero was substantial, the crises taught Cape Town to recognize the importance of investing in water security. The amount of money required for its desalination plants, water recycling systems, and public awareness campaigns may have been substantial, but it paled in comparison to the potential economic, social, and environmental costs of running out of water. The city's investments not only secure Cape Town's water supply; they also position Cape Town as a global leader in water management innovation. For other countries facing similar challenges, there are lessons that can be learned from Cape Town. With collective action and forward-thinking solutions, even the most extreme water crisis can be turned around.

Choose *True*, *False* or *Not Given*.

22. "Day Zero" refers to the day when people in Cape Town would no longer have running water.
- a. True
 - b. False
 - c. Not Given

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

23. The attitude of Cape Town residents to water changed radically during the crisis.
- a. True
 - b. False
 - c. Not Given

ANSWER: a

POINTS: 1

24. The desalination plants used in Cape Town were the largest in the world at that time.
- a. True
 - b. False
 - c. Not Given

ANSWER: c

POINTS: 1

25. Non-native plants are being grown next to rivers and lakes to help improve Cape Town's water supply.
- a. True
 - b. False
 - c. Not Given

ANSWER: b

POINTS: 1

26. Cape Town's response to the water crisis led to a decline in the city's global status.
- a. True
 - b. False
 - c. Not Given

ANSWER: b

POINTS: 1

Read the statements. Decide if the author of the passage would agree or disagree with them. Choose *Agree* or *Disagree*.

27. The cost of the public awareness campaign to get the people of Cape Town to use less water was too high.
- a. Agree
 - b. Disagree

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

28. The Day Zero crisis was actually good for Cape Town in the long run.
- a. Agree
 - b. Disagree

ANSWER: a

POINTS: 1

Choose the best word to complete each sentence.

29. The mayor _____ residents to only water their gardens once a week during the summer months.
- a. asked
 - b. recommended

ANSWER: a

POINTS: 1

30. The engineers claimed that they could access the water found deep under the mountain, but others _____ that getting it would be too expensive.
- a. argued
 - b. announced

ANSWER: a

POINTS: 1

31. The mayor of the city _____ the strategy for reducing water consumption and urged residents not to ignore the advice.
- a. explained
 - b. suggested

ANSWER: a

POINTS: 1

32. They _____ the hotel guests to limit their showers to four minutes or less, and not to take more than one shower a day.
- a. said
 - b. asked

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

33. Local government guidelines _____ using leftover bathwater to water the garden, provided harmful soaps are not used.
- a. inform
 - b. suggest

ANSWER: b

POINTS: 1

34. The mayor _____ reporters that the significant drop in rainfall had halved the amount of water in the city's dams.
- a. told
 - b. said

ANSWER: a

POINTS: 1

Read the sentence. Decide if the advice about doing online research is good or not. Choose *Good* or *Not Good*.

35. Encyclopedia sites are a great primary source of information about a topic.
- a. Good
 - b. Not Good

ANSWER: b

POINTS: 1

36. Limit search results by using quotation marks around specific phrases you want included in the results.
- a. Good
 - b. Not Good

ANSWER: a

POINTS: 1

37. Copy the URL of any site you use, so you have a record of the source of your information.
- a. Good
 - b. Not Good

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

38. Personal blogs are a good source of accurate and credible information.

- a. Good
- b. Not Good

ANSWER: b

POINTS: 1

39. As you take notes, label the information you want to quote directly and the information you want to paraphrase.

- a. Good
- b. Not Good

ANSWER: a

POINTS: 1

Complete the first draft of an essay. Write A–E in the correct places.

40. **A** Scotland is also fortunate to possess an abundant water supply, owing to the relatively high level of rainfall it receives.
- B** Scotland has become an even more welcoming place for immigrants, which has contributed to its economic growth.
- C** As we look to the future, it is evident that Scotland will continue its journey of growth and prosperity.
- D** Scotland's location and its shape have significantly influenced its development.
- E** Scotland is a remarkable country, known for its rich history and its breathtaking landscapes.

_____ Situated in the northern part of the United Kingdom, Scotland's geographical features, its climate, and its liberal immigration policies have played a crucial role in making the nation what it is today.

_____ The country's strategic position in the North Atlantic and its vast coastline have made it a vital player in maritime trade throughout history. The North Sea oil reserves discovered in the late 20th century further boosted Scotland's economy, transforming it into a major player in the global energy

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industry.

_____ This, together with the country's commitment to innovative water management practices such as desalination and water recycling, has allowed it to sustain its population and industries effectively.

Throughout history, emigration and immigration have influenced Scotland's demographic composition and its economy. However, in more recent times, _____ The Scottish government's policies aimed at attracting talent from abroad have been instrumental in driving the nation's progress.

Scotland's success is largely due to its geography and climate, but these natural advantages have been bolstered by the country's commitment to openness and innovation. Scotland is now a thriving and influential member of the international community. _____

ANSWERS: E, D, A, B, C

POINTS: 5

UNIT 8: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. Despite concerns about their viability, the positives of electric vehicles far _____ the negatives.
 - a. reconstruct
 - b. outnumber
 - c. dismiss

ANSWER: b

POINTS: 1

2. After considering various career paths, Jean decided to pursue her passion and _____ chose to become a painter.
 - a. ultimately
 - b. genetically
 - c. historically

ANSWER: a

POINTS: 1

3. Although the company was allowed to mine the area, several key _____ were placed on them.
 - a. implications
 - b. outcomes
 - c. restrictions

ANSWER: c

POINTS: 1

4. The country has several safeguards and _____ in place to ensure that everyone has access to basic healthcare when they need it.
 - a. components
 - b. mechanisms
 - c. implications

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

5. Good mental health is an important _____ of a healthy lifestyle.
- a. mechanism
 - b. restriction
 - c. component

ANSWER: c

POINTS: 1

Read the pair of sentences and consider the meaning of the underlined words. Decide if the two sentences have the same or different meaning. Choose *Same* or *Different*.

6. **A** The ratio of women to men in the medical school is two to one.
B There are twice as many men as women in the medical school.
- a. Same
 - b. Different

ANSWER: b

POINTS: 1

7. **A** All butterflies have a short life span.
B No butterflies live for very long.
- a. Same
 - b. Different

ANSWER: a

POINTS: 1

8. **A** Any researcher found to be faking test results will be immediately dismissed.
B Researchers will lose their jobs if the test results they submit are found to be fraudulent.
- a. Same
 - b. Different

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

9. **A** Scientists will soon be able to use DNA to reconstruct the skeleton of a person who lived 10,000 years ago.
- B** People who lived a long time ago could be brought back to life by scientists who have their DNA.
- a. Same
b. Different

ANSWER: b

POINTS: 1

10. **A** The results of the research project had positive implications in the search for a cure.
- B** The research project led to outcomes that increased the likelihood of finding a cure.
- a. Same
b. Different

ANSWER: a

POINTS: 1

Match the words to the sentences.

- | | | |
|---|---|-----------------|
| 11. He spent a _____ searching for the wreckage of the Flor de la Mar without success. | ● | ● a. lifelong |
| 12. My grandmother had a _____ correspondence with a pen pal whom she never met. | ● | ● b. lifetime |
| 13. My grandfather's _____ is fascinating. He lived through so many major world events. | ● | ● c. life story |

ANSWERS: 11. b, 12. a, 13. c

POINTS: 3

Complete the sentences with the correct words.

outbreak	outgrow	outlook
----------	---------	---------

14. Having teenage sons can be expensive because they _____ their clothes so quickly.

LEVEL 4 Assessment Answer Key

15. The recent _____ of a rare virus in the region caused widespread concern among the population.
16. Despite her persistent health issues, she maintained a positive _____ on life and rarely complained.

ANSWERS: 14. outgrow, 15. outbreak, 16. outlook

POINTS: 3

Read the passage.**Beyond 100 (by Stephen S. Hall)**

Our genes harbor many secrets to a long and healthy life. And now scientists are beginning to uncover them.

- A** Cross-checking the ledger entries against meticulously detailed registry cards (pink for women, white for men) going back to the 19th century, Giordano—along with researchers Alberto Montesanto and Cinzia Martino—has reconstructed extensive family trees of 202 nonagenarians and centenarians in Calabria. The records document not only siblings of people who lived to 100, but also the spouses of siblings, which has allowed Passarino’s group to do a kind of historical experiment on longevity. “We compared the ages of D’Amato’s brothers and sisters to the ages of their spouses,” Giordano explained. “So they had the same environment. They ate the same food. They used the same medicines. They came from the same culture. But they did not have the same genes.” In a 2011 paper, the Calabrian researchers reported a surprising conclusion: Although the parents and siblings of people who lived to at least 90 also lived longer than the general population—a finding in line with earlier research—the genetic factors involved seemed to benefit males more than females.
- B** The Calabrian results on gender offer yet another hint that the genetic twists and turns that confer longevity may be unusually complex. Major European studies had previously reported that women are much likelier to live to 100, outnumbering male centenarians by a ratio of four or five to one, with the implication that some of the reasons are genetic. But by teasing out details from family trees, the Calabrian researchers discovered an intriguing paradox: The genetic component of longevity appears to be stronger in males—but women may take better advantage of external factors such as diet and medical care than men do.
- C** In the dimly lit, chilly hallway outside Passarino’s university office stand several freezers full of tubes containing centenarian blood. The DNA from this blood and other tissue samples has revealed additional information about the Calabrian group. For example, people who live into their 90s and beyond tend to possess a particular version, or allele, of a gene important to taste and digestion. This allele not only gives people a taste for bitter foods like broccoli and field greens, which are typically rich in compounds that promote cellular health, but also allows cells in the intestine to extract nutrients more efficiently from food as it’s being digested.

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- D** Passarino has also found in his centenarians a revved-up version of a gene for what is called an uncoupling protein. The protein plays a central role in metabolism—the way a person consumes energy and regulates body heat—which in turn affects the rate of aging.
- E** “We have dissected five or six pathways that most influence longevity,” says Passarino. “Most of them involve the response to stress, the metabolism of nutrients, or metabolism in general—the storage and use of energy.” His group is currently examining how environmental influences—everything from childhood diet to how long a person attends school—might modify the activity of genes in a way that either promotes or curtails longevity.
- F** Around the world, studies are being done to determine the causes of longevity and health in old age. If nothing else, the plethora of new studies indicates that longevity researchers are pushing the scientific conversation to a new level. In October 2011, the Archon Genomics X Prize launched a race among research teams to sequence the DNA of a hundred centenarians (dubbing the contest “100 over 100”).
- G** But genes alone are unlikely to explain all the secrets of longevity, and experts see a cautionary tale in recent results concerning caloric restriction. Experiments on 41 different genetic models of mice, for example, have shown that restricting food intake produces outcomes that are wildly contradictory. About half the mouse species lived longer, but just as many lived less time on a restricted diet than they would have on a normal diet. And last August, a long-running National Institute on Aging experiment on primates concluded that monkeys kept on a restricted-calorie diet for 25 years showed no longevity advantage. Passarino made the point while driving back to his laboratory after visiting the centenarians in Molochio. “It’s not that there are good genes and bad genes,” he said. “It’s certain genes at certain times. And in the end, genes probably account for only 25 percent of longevity. It’s the environment, too, but that doesn’t explain all of it either. And don’t forget chance.”
- H** Which brought to mind Salvatore Caruso of Molochio, 107 years old and still going strong. Because he broke his leg 88 years ago, he was unfit to serve in the Italian Army when his entire unit was recalled during World War II. “They were all sent to the Russian front,” he said, “and not a single one of them came back.” It’s another reminder that although molecules and mechanisms yet unfathomed may someday lead to drugs that help us reach a ripe and healthy old age, a little luck doesn’t hurt either.

Choose the correct answers.

17. The research done by the scientific team mentioned in paragraph **A** focused on _____.
- people in their 90s and 100s
 - only people in their 90s
 - only people over 100
 - anyone over 80

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

18. According to the European studies mentioned in paragraph **B**, if one hundred women live to be 100, the number of men who live to be 100 would be _____.
- a. under 10
 - b. 20–25
 - c. 40–50
 - d. 100

ANSWER: b

POINTS: 1

19. One reason people live to an advanced age is because of a gene that _____.
- a. makes bitter but nutritious food taste good
 - b. makes cells in the intestines digest foods more quickly
 - c. decreases the body heat of elderly people
 - d. fundamentally changes the DNA of these people

ANSWER: a

POINTS: 1

20. The word *promotes* in the last sentence of paragraph **E** is closest in meaning to _____.
- a. recommends
 - b. celebrates
 - c. upgrades
 - d. aids

ANSWER: d

POINTS: 1

21. In paragraph **H**, the author focuses on what factor that permitted Salvatore Caruso to live a long life?
- a. molecules
 - b. drugs
 - c. diet
 - d. luck

ANSWER: d

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the passage.**Longevity and Laron Syndrome**

- A** To uncover the secrets of long life, researchers are increasingly turning to genetics for answers. One interesting genetic case study is Nicolas Añazco—known as *Pajarito*, or “Little Bird” in Spanish.
- B** In many ways, Little Bird is a typical teen. He plays video games and soccer. Living with his family in a four-room home in the rural uplands of Ecuador’s El Oro Province at the foot of the Andes, he helps his father process the sugarcane that surrounds his house.
- C** Little Bird became grudgingly aware of the reason for his nickname when he was just six. He recalls meeting his classmates on his first day of school: “I realized that I was going to be smaller than them.” Much smaller, in fact, because of a rare mutation in one single gene. Today, aged 17, Little Bird looks like an eight-year-old and is only three feet nine inches (114 cm) tall. Little Bird’s condition, known as Laron syndrome, slows down growth. But it may also protect him from some of the serious diseases that typically ravage humans as they age.
- D** One afternoon, Little Bird and three other Laron syndrome men from the region agreed to an interview at the back of an appliance store, their feet dangling in child-sized shoes from their chairs. Joining Little Bird were Freddy Salazar, 39 years old and three feet ten inches (117 cm) tall, Victor Rivera, 23 years old and slightly taller than Salazar, and Luis Sanchez, the oldest member of the group at 43. When someone asked if the four men were aware of the latest scientific reports about their condition, the response was a chorus of high-pitched laughter. “We are laughing,” explained Sanchez, “because we know we are immune to cancer and diabetes.”
- E** That somewhat overstates the scientific results to date, but it does reflect a growing interest among researchers to investigate the genomes of unusually healthy or long-lived groups of people, whose isolation—geographical or cultural—makes it easier to find genetic clues to longevity, disease resistance, and good health at an advanced age.
- F** One such scientist is Little Bird’s physician, Jaime Guevara. Fascinated by the region’s “little people,” as they have been known since before their condition even had a name, he began to study them around 1987. After a quarter century of research, he identified about a hundred people with the Laron mutation scattered throughout the hills of southern Ecuador.
- G** Meche Romero Robles, a 40-year-old single mother, is also one of Guevara’s patients. Just over four feet tall, Robles lives with her teenage daughter, Samantha, in a simple home. “Look at her!” Guevara cried, “She should have diabetes. Given her body mass index, she must have diabetes. But she doesn’t.” Even to a nonmedical eye, Meche appeared overweight. Like so many little people, however, she remained free of diabetes. “I realized this in 1994,” Guevara said, “but no one would believe me.”
- H** That began to change in 2005, when Valter Longo, a cell biologist at the University of Southern California who studies aging, invited Guevara to the University of Southern California (USC) to describe his research.

LEVEL 4 Assessment Answer Key

Longo thought Guevara's patients might represent an experiment of nature—an isolated population with a condition that linked genetics to longevity.

- I** A decade earlier, Longo had begun to manipulate the genes of simple organisms like single-celled yeast, creating mutations that allowed them to live longer, and he wasn't the only one experimenting with these processes. In 1996 Andrzej Bartke, a scientist at Southern Illinois University, tinkered with mouse genes associated with growth. He showed—not surprisingly—that shutting down the growth hormone pathway resulted in smaller mice. What was surprising was that these smaller mice lived longer—about 40 percent longer—than normal mice. Could similar processes be at work in humans?
- J** Guevara and Longo began to collaborate in 2006. Guevara had found a homogeneous group in one geographic location with a known genetic mutation that seemed to block the development of diabetes and cancer in individuals. Within this Laron group, there were no cases of diabetes and only a single, nonlethal instance of cancer. In a control group of people the same age living in the same area, Guevara and Longo found that five percent developed diabetes and 20 percent died of cancer. Follow-up experiments conducted by Longo at USC showed that blood taken from the group with the genetic mutation seemed to protect human cells from laboratory-induced cancers. What was the magic ingredient in their blood?
- K** "Nothing," Longo says. Nothing? In fact, it was the absence of something—a hormone known as IGF-1. The blood was protective, Longo says, because it had unusually low levels of IGF-1, which plays an important role in childhood growth, but which has also been implicated as an accelerant of cancers and a powerful regulator of metabolism. Could controlling the presence of one hormone in human blood postpone the diseases of old age? It's probably not quite that simple, but IGF-1 keeps popping up in longevity research.

Choose *True*, *False* or *Not Given*.

22. Little Bird was the youngest of the four people with Loran syndrome who were interviewed.
- True
 - False
 - Not Given

ANSWER: a

POINTS: 1

23. Only men can have Loran syndrome.
- True
 - False
 - Not Given

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

24. Valter Longo got his Ph.D. in cell biology from the University of Southern California.
- a. True
 - b. False
 - c. Not Given

ANSWER: c

POINTS: 1

25. In the group of people with Loran syndrome studied by Guevara, none had developed diabetes.
- a. True
 - b. False
 - c. Not Given

ANSWER: a

POINTS: 1

26. It is the high concentration of the IGF-1 hormone that protects people with Loran syndrome from diabetes and cancer.
- a. True
 - b. False
 - c. Not Given

ANSWER: b

POINTS: 1

Read the statements. Choose *Answered* or *Not Answered*.

27. Why did Jaime Guevara become interested in studying the people with Laron syndrome?
- a. Answered
 - b. Not Answered

ANSWER: a

POINTS: 1

28. Have there been any attempts to manipulate IGF-1 levels in human blood to study its effects on aging and disease prevention?
- a. Answered
 - b. Not Answered

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

Complete the sentence using the correct form of each word in parentheses.

29. The _____ (**imply**) of the study is that the connection between diet and heart health is even closer than we thought.

ANSWER: implication

POINTS: 1

30. The results of the experiment _____ (**indicate**) a significant increase in productivity among the participants.

ANSWER: indicate / indicated

POINTS: 1

31. Last summer's experiment _____ (**demonstrate**) the potential of clay roof tiles to reduce energy consumption.

ANSWER: demonstrated

POINTS: 1

32. The study provided _____ (**support**) evidence for the effectiveness of physiotherapy as a treatment for the condition.

ANSWER: supportive / supporting

POINTS: 1

33. The data _____ (**show**) in the graph indicates a clear decline in pollution levels over the past decade.

ANSWER: shown

POINTS: 1

34. Numerous studies over the past five years _____ (**report**) that smartphone use negatively affects the quality of sleep that people are getting.

ANSWER: have reported

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each sentence. Decide whether the topic is suitable for an argumentative essay. Choose *Yes* or *No*.

35. Education, including college, should be free for everyone.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

36. Standardized tests such as the SAT, GRE, and TOEFL should not be used to determine who is accepted into a university.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

37. Universities around the world have different entry requirements.

- a. Yes
- b. No

ANSWER: b

POINTS: 1

38. There are rain forests in many different regions of the world.

- a. Yes
- b. No

ANSWER: b

POINTS: 1

39. Dangerous sports such as boxing must be banned.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Read each statement. Decide whether it would be suitable as a topic for an argumentative research paper. Choose *Yes* or *No*.

40. The sale of sugary beverages has to be restricted to combat obesity.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

41. Fast food restaurants should be forced to have healthy options on their menus.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

42. There are many benefits to exercising regularly.

- a. Yes
- b. No

ANSWER: b

POINTS: 1

43. Hospitals should hire interpreters to better understand all of their patients' needs.

- a. Yes
- b. No

ANSWER: a

POINTS: 1

44. The impact of air pollution on respiratory health is getting worse in many cities.

- a. Yes
- b. No

ANSWER: b

POINTS: 1

UNIT 9: ADDITIONAL QUESTIONS

Choose the correct word to complete each sentence.

1. The child tried to _____ his terrible test results by using a pen to change the grade on his test sheet before showing it to his parents.
- a. impede
 - b. cover up
 - c. speculate

ANSWER: b

POINTS: 1

2. Despite the teacher's _____ words, he felt sure he was going to get in trouble for plagiarizing the essay.
- a. reassuring
 - b. implicit
 - c. prominent

ANSWER: a

POINTS: 1

3. Honesty is a _____ character requirement for someone who wants to work in law enforcement.
- a. fundamental
 - b. prominent
 - c. deceptive

ANSWER: a

POINTS: 1

4. The manager tried to _____ his workload by outsourcing two of the tasks he was assigned.
- a. speculate
 - b. impede
 - c. lessen

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

5. Truthfulness is _____ regarded as a cornerstone of strong interpersonal relationships.
- universally
 - prominently
 - systematically

ANSWER: a

POINTS: 1

Complete the sentences with the correct words.

deceptive	impede	prone to	speculate	tendency
-----------	--------	----------	-----------	----------

6. The price shown on the website was _____ as there were several hidden charges.
7. There is a growing _____ among young people to use filters on all their social media images.
8. Reporters didn't know why she resigned so suddenly. They could only _____.
9. The police told him that any lies he told would _____ the investigation.
10. The child was _____ exaggerating, so no one believed him at first when he told them about the intruder.

ANSWERS: 6. deceptive, 7. tendency, 8. speculate, 9. impede, 10. prone to

POINTS: 5

Match the words to the sentences.

- | | |
|--------------------|---|
| 11. persistence ● | ● a. She used her _____ to cheat and defraud people who were not as clever as she was. |
| 12. prominence ● | ● b. He attributes his success to his _____. He keeps going no matter how many obstacles he encounters. |
| 13. intelligence ● | ● c. He gained _____ in his community because of his generous contributions to several local charities. |

ANSWERS: 11. b, 12. c, 13. a

POINTS: 3

LEVEL 4 Assessment Answer Key

14. deception ● ● a. The con artist was an expert at using _____ to cheat and defraud others.
15. deceptively ● ● b. The court concluded that she obtained the money _____ by lying about her past.
16. deceitfully ● ● c. The six-bedroom house appeared _____ small from the outside.

ANSWERS: 14. a, 15. c, 16. b

POINTS: 3

Read the passage.**Why We Lie (by Yudhijit Bhattacharjee)**

- A** Kids also get better at lying as they get older. When asked to guess the identity of the toy that they have secretly looked at, three- and four-year-olds typically give the right answer straightaway—they don't realize that this reveals that they cheated. At seven or eight, kids learn to deliberately give a wrong answer at first, or they try to make their answer seem like a reasoned guess.
- B** Five- and six-year-old kids fall in between. In one study, Lee used a Barney The Dinosaur toy. One five-year-old girl denied that she had looked at the toy, which was hidden under a cloth. Then she told Lee she wanted to feel it before guessing. "So she puts her hand underneath the cloth, closes her eyes, and says, 'Ah, I know: it's Barney,'" Lee recalls. "I ask, 'Why?' She says, 'Because it feels purple.'"
- C** What drives this increase in lying sophistication is the development of a child's ability to put himself or herself in someone else's shoes. Known as "theory of mind," this is the facility we acquire for understanding the beliefs, intentions, and knowledge of others. Also fundamental to lying is the brain's executive function: the abilities required for planning, making decisions, and self-control. This explains why the two-year-olds who lied and lied well in Lee's experiments performed better on tests of theory of mind and executive function than those who didn't.
- D** As we grow older, much of the knowledge we use to navigate the world comes from what others tell us. Without the implicit trust that we place in human communication, we would be paralyzed as individuals and cease to have social relationships. "We get so much from believing, and there's relatively little harm when we occasionally get duped," says Tim Levine, a psychologist at the University of Alabama.
- E** Being programmed to trust makes us naturally gullible. "If you say to someone, 'I am a pilot,' they are not sitting there thinking: 'Maybe he's not a pilot. Why would he say he's a pilot?' They don't think that way," says Frank Abagnale, Jr. Now a security consultant, Abagnale's cons as a young man—including forging checks and pretending to be an airline pilot—inspired the 2002 movie *Catch Me If You Can*. "This is why

LEVEL 4 Assessment Answer Key

scams work,” he says. “When the phone rings and the caller ID says it’s the Internal Revenue Service, people automatically believe it is the IRS. They don’t realize that someone could manipulate the caller ID.”

- F** Robert Feldman, a psychologist at the University of Massachusetts, calls that “the liar’s advantage.” “People are not expecting lies, people are not searching for lies,” he says, “and a lot of the time, people want to hear what they are hearing.” We put up little resistance to the deceptions that please or comfort us—such as false praise or the promise of impossibly high investment returns. And when we deal with people who have wealth, power, and status, the lies appear to be even easier to swallow.
- G** Researchers are now learning that we are prone to believe some lies even when they’re clearly contradicted by evidence. These insights suggest that our skill at deceiving others—combined with our vulnerability to being deceived—is especially consequential in the age of social media. Research has shown, for example, that we are especially prone to accepting lies that affirm our worldview. False news stories thrive on the internet and in social media because of this vulnerability, and disproving them does not tend to lessen their power. This is because people assess the evidence presented to them through a framework of preexisting beliefs and prejudices, says George Lakoff, a cognitive linguist at the University of California, Berkeley. “If a fact comes in that doesn’t fit into your frame, you’ll either not notice it, or ignore it, or ridicule it, or be puzzled by it—or attack it if it’s threatening.”
- H** What then might be the best way to impede the rapid advance of untruths into our collective lives? The answer isn’t clear. Technology has opened up a new frontier for deceit, adding a 21st-century twist to the age-old conflict between our lying and trusting selves.

Choose the correct answer to each question.

17. The word *reasoned* in the last sentence of paragraph **A** is closest in meaning to _____.
- a. well thought out
 - b. methodical
 - c. systematic
 - d. cleverly expressed

ANSWER: a

POINTS: 1

18. At what age do children typically start to become more sophisticated at lying?
- a. Two to three years old
 - b. Three to four years old
 - c. Five to six years old
 - d. Seven to eight years old

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

19. Which of the following would Kang Lee probably consider to be a true statement?
- a. A child's ability to lie is tied to their ability to plan and make decisions.
 - b. Children are not capable of putting themselves in others' shoes.
 - c. Children are more practiced liars than many adults.
 - d. Learning to lie is the beginning of the loss of innocence.

ANSWER: a

POINTS: 1

20. What is the liar's advantage?
- a. People will believe lies more if there is a financial advantage.
 - b. It is easier to lie to people if you flatter them first.
 - c. Liars are more skilled at manipulating people than those who rarely lie.
 - d. People's basic starting point is to trust what people tell them.

ANSWER: d

POINTS: 1

21. How do people rarely react to seeing facts on social media that contradict a lie they have accepted as true?
- a. They ignore evidence that doesn't fit with their beliefs.
 - b. They stick to their mistaken beliefs.
 - c. They reevaluate their beliefs according to new evidence.
 - d. They criticize the fact as being untrue.

ANSWER: c

POINTS: 1

Read the passage.

Lying on a Different Level

- A** On a recent morning, I visited Dan Ariely, a psychologist at Duke University and one of the world's foremost experts on lying. Ariely became fascinated with dishonesty about 15 years ago. Looking through a magazine on a long-distance flight, he came across a mental aptitude test. He answered the first question and flipped to the answer key in the back to see if he got it right. He found himself taking a quick glance at the answer to the next question. Continuing in this vein through the entire test, Ariely, not surprisingly, scored very well. "When I finished, I thought—I cheated myself," he says. "Presumably, I wanted to know how smart I am, but I also wanted to prove I'm this smart to myself." The experience led Ariely to develop a lifelong interest in the study of lying and other forms of dishonesty.
- B** In experiments he and his colleagues have run on college campuses and elsewhere, volunteers are given a test with 20 simple math problems. They must solve as many as they can in five minutes and are paid

LEVEL 4 Assessment Answer Key

based on how many they get right. They are then told to destroy the sheets by dropping them into a shredder before reporting the number they solved correctly. But the sheets don't actually get shredded. A lot of volunteers lie, as it turns out. On average, volunteers report having solved six problems, when it was really more like four. The results are similar across different cultures. Most of us lie, but only a little.

- C** The question Ariely finds interesting is not why so many lie, but rather why they don't lie a lot more. Even when the amount of money offered for correct answers is raised significantly, the volunteers don't increase their level of cheating. The reason, according to him, is that we want to see ourselves as honest, because we have, to some degree, internalized honesty as a value taught to us by society. Which is why most of us place limits on how much we are willing to lie. How far most of us are willing to go is determined by social norms arrived at through unspoken consensus—like the tacit acceptability of taking a few pencils home from the office supply cabinet.
- D** But there is a minority of people who lie without such limits. Patrick Couwenberg was a well-respected judge in the Los Angeles County Superior Court, United States. His colleagues and staff also believed him to be an American hero. By his account, he had received a Purple Heart—a prestigious medal given to him in the name of the president for his service in the military—and participated in undercover operations for the Central Intelligence Agency. The judge boasted of an impressive educational background as well—an undergraduate degree in physics and a master's degree in psychology. But none of it was true.
- E** When confronted about his lies, Couwenberg's defense was to blame a psychological condition called *pseudologia fantastica*—a tendency to tell stories containing facts interwoven with fantasy. The argument, however, didn't save him from losing his job.
- F** There appears to be no agreement among psychiatrists about the relationship between mental health and lying, even though people with certain psychiatric disorders seem to exhibit specific lying behaviors. Sociopathic individuals—those diagnosed with antisocial personality disorder—tend to tell manipulative lies, while narcissists may tell falsehoods to boost their image.
- G** But is there anything unique about the brains of individuals like Judge Couwenberg who lie more than others? In 2005, psychologist Yaling Yang and her colleagues compared the brain scans of three groups: people with a history of repeated lying, people with antisocial personality disorder who were not frequent liars, and people who were neither antisocial nor had a lying habit. The researchers found that the liars had at least 20 percent more neural fibers by volume in their prefrontal cortices, suggesting that habitual liars have greater connectivity within their brains. This could possibly predispose them to lying because they are able to think up lies more readily than others—or it might be the result of repeated lying.
- H** In another study, psychologists Nobuhito Abe at Kyoto University and Joshua Greene at Harvard University scanned the brains of subjects using functional magnetic resonance imaging (fMRI). They found that people prone to acting dishonestly showed greater activity in the nucleus accumbens—a part of the brain that plays a key role in reward processing. "The more excited your reward system gets at the possibility of getting money—even in a perfectly honest context—the more likely you are to cheat," explains Greene. In other words, greed may increase one's predisposition to lying.

LEVEL 4 Assessment Answer Key

- I It has also been suggested that one lie can lead to another. An experiment by Tali Sharot, a neuroscientist at University College London, and colleagues showed how the brain becomes better at dealing with the stress or emotional discomfort that happens when we lie, making it easier to tell the next fib. The researchers found that the amygdala's response to lies got progressively weaker with each lie, even as the lies got bigger. "Perhaps engaging in small acts of deception can lead to bigger acts of deception," she says.

Choose the best answers.

22. Which of the following is NOT true about Ariely's experiment?
- a. The volunteers received money depending on their performance in the test.
 - b. The volunteers thought their tests were destroyed when they reported their scores.
 - c. Volunteers were required to complete a simple math test.
 - d. The answer sheets were destroyed once the test had finished.

ANSWER: d

POINTS: 1

23. In the passage, "taking a few pencils home from the office supply cabinet" is given as an example of _____.
- a. a common lie that people told in Ariely's experiment
 - b. behavior that Ariely's research has shown is uncommon
 - c. a way to tell if someone is a sociopath
 - d. a socially acceptable dishonest act

ANSWER: d

POINTS: 1

24. Which of the following is the most accurate description of *pseudologia fantastica*?
- a. a condition that causes someone to make up stories that combine the truth with lies
 - b. a condition that makes people tell incredible stories that have no element of truth
 - c. a condition that causes a person to believe everything they hear
 - d. a condition that makes someone believe the lies that they tell

ANSWER: a

POINTS: 1

25. The purpose of Yaling Yang's 2005 study was to _____.
- a. discover the causes of antisocial personality disorder in adults
 - b. identify the types of lies that people with antisocial personality disorder tell
 - c. find out if the brains of people who lie regularly are different
 - d. find out how many people with antisocial personality disorder were also frequent liars

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

26. According to the experiment by Tali Sharot, _____.
- a. the more lies that someone tells, the more stress they will have in their life
 - b. the more lies a person tells, the less they are affected by telling lies
 - c. most people tell bigger and bigger lies as they get older
 - d. people who told more lies had larger amygdalas

ANSWER: b

POINTS: 1

Read each summary of a psychological experiment.**Fantz's Looking Chamber**

In 1961, developmental psychologist Robert Fantz conducted a simple, but important experiment. Before this experiment was conducted, it was thought that young babies had no understanding of the world they saw. However, Fantz made a discovery that advanced the ability of researchers to investigate infants' visual perception: Infants look at different things for different lengths of time.

Fantz's experiments were designed to determine if babies have a preference for what they look at. He did this by creating a setup called the "looking chamber." This chamber looked like an MRI machine. Babies were placed inside the chamber and shown two images. On one was a bullseye (the circular spot at the center of a target marked with concentric circles and used in target practice), and on the other was the sketch of a human face. Fantz viewed the infant's eyes by looking through a peephole. If the infant was focusing on one of the displays, he could see the display's reflection in the infant's eyes, and he measured how long the infant looked at each display. This study showed that a two-month-old infant looked twice as much at the human face as it did at the bullseye. Fantz suggested that this is because babies are born with an innate ability to recognize human faces—possible sources of both food and care.

Decide whether the sentences taken from the summary describe the *Purpose*, *Method*, *Results*, or *Conclusion* of the experiment. Choose the correct answer.

27. Fantz's experiments were designed to determine if babies have a preference for what they look at.
- a. Purpose
 - b. Method
 - c. Results
 - d. Conclusion

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

28. He did this by creating a setup called the "looking chamber." This chamber looked like an MRI machine. Babies were placed inside the chamber and shown two images. On one was a bullseye and on the other was the sketch of a human face.
- a. Purpose
 - b. Method
 - c. Results
 - d. Conclusion

ANSWER: b

POINTS: 1

Choose the best option to suit the tone of each sentence.

29. The results of the exit survey were really good— _____ of the participants enjoyed the seminar.
- a. more than 90%
 - b. less than 100%

ANSWER: a

POINTS: 1

30. Unfortunately, the software is still not perfect. It can only detect _____ of the faulty parts.
- a. just under 60%
 - b. fewer than two thirds

ANSWER: b

POINTS: 1

31. _____ the researchers working on this project were very satisfied with the great results.
- a. Nearly all of
 - b. Less than all of

ANSWER: a

POINTS: 1

32. They were shocked that _____ of the books in the school library were outdated and contained factual errors.
- a. more than one fifth
 - b. less than 25%

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

33. Despite some progress on equality, _____ of the executives in this industry are women.
- a. less than a quarter
 - b. nearly one in four

ANSWER: a

POINTS: 1

34. The advertisement states that _____ of their customers feel that their products “exceed expectations.”
- a. fewer than three-quarters
 - b. almost seventy-five percent

ANSWER: b

POINTS: 1

Decide which part of the research summary the sentence belongs to. Choose the correct answer.

35. Children were not rewarded for guessing the toys correctly.

- a. Purpose
- b. Method
- c. Results
- d. Conclusion

ANSWER: b

POINTS: 1

36. Researchers observed that the older the child was, the more sophisticated their ability to lie was.

- a. Purpose
- b. Method
- c. Results
- d. Conclusion

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

37. More than two thirds of the children looked at the toy when the researcher left the room during the experiment.

- a. Purpose
- b. Method
- c. Results
- d. Conclusion

ANSWER: c

POINTS: 1

38. The goal was to find out the age at which children developed the ability to cover up their lies.

- a. Purpose
- b. Method
- c. Results
- d. Conclusion

ANSWER: a

POINTS: 1

39. This experiment clearly shows that lying is not a learned behavior, but a skill that is innate in all of us.

- a. Purpose
- b. Method
- c. Results
- d. Conclusion

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Complete the sentences.

- | | | |
|--|---|------------------|
| 40. The purpose of the experiment was to _____ the connection between lying and intelligence. | ● | ● a. measure |
| 41. The researchers used a standard IQ test to _____ the intelligence of the participants. | ● | ● b. observe |
| 42. The researchers were able to _____ participants via hidden cameras placed around the room. | ● | ● c. prove |
| 43. The researchers were surprised to _____ that there was no difference among participants when the lying benefited only the person who lies. | ● | ● d. discover |
| 44. In conclusion, the study was unable to _____ if there was a link between lying and intelligence. | ● | ● e. investigate |

ANSWERS: 40. e, 41. a, 42. b, 43. d, 44. c

POINTS: 5

UNIT 10: ADDITIONAL QUESTIONS**Choose the correct word to complete each sentence.**

1. It is difficult for most people to _____ how severely climate change will affect us if the problem is left unchecked.
- a. accelerate
 - b. eliminate
 - c. grasp

ANSWER: c

POINTS: 1

2. They were able to _____ the need for pesticides thanks to the introduction of natural predators into the ecosystem.
- a. accelerate
 - b. eliminate
 - c. grasp

ANSWER: b

POINTS: 1

3. From a global _____, the impact of human activity on the environment is not the responsibility of only one country.
- a. perspective
 - b. criteria
 - c. irony

ANSWER: a

POINTS: 1

4. There is little _____ in driving electric vehicles if electricity is still produced with fossil fuels.
- a. merit
 - b. geology
 - c. perspective

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

5. People are _____ to a plant-based diet as they become aware of the harm large scale animal farming can have on the land.
- grasping
 - eroding
 - shifting

ANSWER: c

POINTS: 1

Complete the sentences with the correct words.

concluding	erosion	intriguing	shifting	subtle
------------	---------	------------	----------	--------

6. There has been a(n) _____ of public trust in government because of its many broken promises regarding economic and environmental reform.
7. The researchers published their findings, _____ that the rate at which sea levels are rising is accelerating.
8. The attitude towards climate change is _____ because its effects are starting to be felt more severely.
9. It is _____ to see how even small changes in our behavior can have a big impact on the environment.
10. Even a(n) _____ increase in global temperature can lead to extreme weather events.

ANSWERS: 6. erosion, 7. concluding, 8. shifting, 9. intriguing, 10. subtle

POINTS: 5

Match the words to the definitions.

- | | | |
|------------------|---|--|
| 11. biology | ● | ● a. the study of diseases and how they spread |
| 12. epidemiology | ● | ● b. the study of human laws and people who break them |
| 13. criminology | ● | ● c. the study of living organisms |

ANSWERS: 11. c, 12. a, 13. b

POINTS: 3

LEVEL 4 Assessment Answer Key

Complete the sentences.

- | | | | |
|---|---|---|----------------|
| 14. There was a dramatic _____ in air quality when the chemical plant closed down. | ● | ● | a. difference |
| 15. There was a dramatic _____ in accidents when the speed limit was reduced on the road. | ● | ● | b. improvement |
| 16. There is a dramatic _____ between the size of chickens in the 1950 compared to today. | ● | ● | c. decline |

ANSWERS: 14. b, 15. c, 16. a

POINTS: 3

Read the passage.**The Human Age (by Elizabeth Kolbert)**

- A** Probably the most significant change, from a geologic perspective, is one that's invisible to us—the change in the composition of the atmosphere. Carbon dioxide emissions are colorless, odorless, and—in an immediate sense—harmless. But their warming effects could easily push global temperatures to levels that have not been seen for millions of years. Some plants and animals are already shifting their ranges toward the Poles, and those shifts will leave traces in the fossil record. Some species will not survive the warming at all. Meanwhile, rising temperatures could eventually raise sea levels 20 feet (6 meters) or more.
- B** Long after our cars, cities, and factories have turned to dust, the consequences of burning billions of tons' worth of coal and oil are likely to be clearly discernible. As carbon dioxide warms the planet, it also seeps into the oceans and acidifies them. Sometime this century, they may become acidified to the point that corals can no longer construct reefs, which would register in the geologic record as a "reef gap." Reef gaps have marked each of the past five major mass extinctions. The most recent one—which is believed to have been caused by the impact of an asteroid—took place 65 million years ago, at the end of the Cretaceous period; it eliminated not just the dinosaurs but also the plesiosaurs, pterosaurs, and ammonites. Since then, there has been nothing to match the scale of the changes that we are now seeing in our oceans. To future geologists, British geologist Jan Zalasiewicz says, our impact may look as sudden and profound as that of an asteroid.
- C** If we have indeed entered a new epoch, then when exactly did it begin? When did human impacts rise to the level of geologic significance?
- D** William Ruddiman, a paleoclimatologist at the University of Virginia, proposed that the invention of agriculture some 8,000 years ago—and the deforestation that resulted—led to an increase in atmospheric CO₂ just large enough to stave off what otherwise would have been the start of a new ice age. In his view,

LEVEL 4 Assessment Answer Key

humans have been the dominant force on the planet practically since the start of the Holocene. Crutzen suggested that the Anthropocene began in the late 18th century, when, ice cores show, carbon dioxide levels began what has since proved to be an uninterrupted rise. Other scientists put the beginning of the new epoch in the middle of the 20th century, when the rates of both population growth and consumption accelerated rapidly.

- E** To answer the question definitively, a working group of the International Commission on Stratigraphy (ICS) was assembled. Initially headed by Zalasiewicz, the group was tasked with officially determining whether the Anthropocene deserves to be incorporated into the geologic timescale. As expected, the investigation dragged on for many years. However, the decision did become easier over time as the impact of humans on the planet grew and became even more stratigraphically significant. In 2016, a decision was finally reached. The working group agreed that the Anthropocene is indeed a distinct epoch, separate from the Holocene. They also concluded that the human age began in the year 1950, when the Great Acceleration—a dramatic increase in the rate of population growth and human activity affecting the planet—took off.
- F** For Crutzen, who started the debate, the real value of recognizing the Anthropocene doesn't lie in the revisions that have to be made to geology textbooks. His purpose is broader: He wants to focus our attention on the consequences of our collective action—and on how we might still avert the worst. "What I hope," he says, "is that the term Anthropocene will be a warning to the world."

Choose the correct answers.

17. What long-lasting consequence of human activity is NOT mentioned in the passage?
- a. the damage to underwater plant life by materials such as plastics
 - b. the acidification of oceans caused by burning fossil fuels
 - c. the movement of animal species away from the equator regions

ANSWER: a

POINTS: 1

18. What was the main goal of the International Commission on Stratigraphy?
- a. to propose an acceptable starting date for the Anthropocene
 - b. to discover the main causes for the changes we see in the Anthropocene
 - c. to say for certain that the Anthropocene was different from the previous epoch

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

19. Why do some scientists believe that the start date of the Anthropocene should be eight thousand years ago?
- That was when humans began farming on a large scale.
 - That was when the last ice age ended.
 - That was when CO₂ increases led to the loss of some species of trees.

ANSWER: a

POINTS: 1

20. What does Paul Crutzen hope to gain from the Anthropocene being accepted as a distinct epoch?
- He wants geology textbooks to be revised to include the new epoch.
 - He wants to gain recognition as the man who started the debate surrounding the new epoch.
 - He wants society to focus on how to lessen the impact humans are having on the Earth.

ANSWER: c

POINTS: 1

21. In the final sentence of paragraph E, the phrase *took off* is closest in meaning to _____.
- increased
 - began
 - became successful

ANSWER: b

POINTS: 1

Read the passage.

Rising Seas

- A** Hurricane Ian, which hit the Caribbean, the Gulf of Mexico, and the U.S. in September 2022, was the fifth Category 5 Atlantic hurricane to make landfall in as many years. It resulted in 161 fatalities and caused an estimated \$113 billion in damage due to flooding. And yet, outside of the affected areas, few people even remember the name of this storm as hurricanes of this magnitude are unfortunately becoming almost commonplace.
- B** The vast majority of scientists agree that the recent increase in the number and strength of hurricanes is caused predominantly by climate change resulting from human activities. But storms and hurricanes are only the start. Sea level rise is likely to pose much more serious problems. By studying sediment cores, scientists have determined that sea levels have remained stable for most of the last 2,000 years. Since the rise of industrialization in the late 19th century, however, the Earth has started to warm, melting polar ice and causing sea levels to rise. At current rates, sea levels could go up by more than one meter this century.

LEVEL 4 Assessment Answer Key

The damage this would cause would be unfathomable: By 2070, as many as 150 million people could be displaced and \$35 trillion in property worldwide could be destroyed by coastal flooding.

- C** How will cities cope with this? For guidance, many cities around the world are turning to the Netherlands—a country that had to face and overcome the problem of rising seas some 70 years ago when the country was confronted with its own coastal catastrophe.
- D** On the night of January 31, 1953, the country was met by a storm that roared in from the North Sea. Ria Geluk—the founder of the Netherlands’ Watersnoodmuseum, or “flood museum”—was just six years old at the time, living on an island in the Dutch province of Zeeland. She remembers a neighbor knocking on her family’s door in the middle of the night to tell them the flood wall had failed. Later in the day, the whole family climbed to the roof. Geluk’s grandparents lived just across the road, but water poured into the village with such force that they were trapped in their home. Sadly, their house collapsed, and they died inside. In total, the disaster killed 1,836 people, including a baby born on the night of the storm.
- E** After the storm, the Dutch began an ambitious program of flood wall and barrier construction called the Delta Works. The program lasted more than four decades and cost the Netherlands more than \$6 billion. One crucial part of the project was the construction of an eight-kilometer barrier, built to defend Zeeland’s coast from the sea. The final component of the Delta Works program was finished in 1997. It was a moveable barrier protecting Rotterdam Harbor and some 1.5 million people. Like all the other sea barriers built in the Netherlands, it was built to withstand a 1-in-10,000-year storm—the strictest standard for sea barriers worldwide.
- F** Today, the Netherlands’ sea barriers still stand strong. However, an inscription on the side of a storm-surge barrier in Zeeland carries a message that has perhaps become a little outdated: “*Hier gaan over het tij, de maan, de wind, en wij*”—Here the tide is ruled by the moon, the wind, and us. It reflects the confidence of a generation that assumed a reasonably stable world, something we can no longer afford to do. “We have to understand that we are not ruling the world,” says Jan Mulder of Deltares, a Dutch coastal management firm. “We need to adapt.”
- G** Even if we radically reduce our emissions of heat-trapping greenhouse gases tomorrow, oceans will likely continue to rise as it will take some time for Earth to adjust. It is therefore too late to prevent rising sea levels: cities will instead have to learn to cope with it. Among the most vulnerable cities is Miami. “I cannot envision southeastern Florida having many people at the end of this century,” says Hal Wanless of the University of Miami’s Department of Geological Science. “We think Miami has always been here and will always be here. How do you get people to realize that Miami—or London—will not always be there?”

Choose True, False or Not Given.

22. Five Category 5 hurricanes hit land in the five years leading up to 2022.
- True
 - False
 - Not Given

LEVEL 4 Assessment Answer Key

ANSWER: a

POINTS: 1

23. Since the 19th century, the sea level has risen ten centimeters a decade on average.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

24. Ria Geluk's parents were killed in a storm when she was six years old.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

25. The barrier built to defend Zeeland from the sea is the longest such wall in the world.

- a. True
- b. False
- c. Not Given

ANSWER: c

POINTS: 1

26. Hal Wanless believes that Miami will not be affected by rising sea levels.

- a. True
- b. False
- c. Not Given

ANSWER: b

POINTS: 1

Choose the correct answers.

27. What is the rhetorical purpose of paragraph **B**?

- a. to describe how climate change could be tackled
- b. to present both sides of the climate change debate
- c. to show how severely climate change will impact the planet

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

28. What is the rhetorical purpose of the story in paragraph **D**?
- a. to make the consequences of coastal flooding more relatable
 - b. to show how people in the Netherlands are more practical than those in other countries
 - c. to illustrate how expensive the damage caused by storms can be

ANSWER: a

POINTS: 1

Choose the option that combines the sentences correctly.

29. The frequency of extreme weather events is increasing. Many governments have been slow to implement climate policies.
- a. The frequency of extreme weather events is increasing although many governments have been slow to implement climate policies.
 - b. Although the frequency of extreme weather events is increasing, many governments have been slow to implement climate policies.

ANSWER: b

POINTS: 1

30. Climate change affects weather patterns. It contributes to the increasing severity of storms.
- a. Climate change, which affects weather patterns, contributes to the increasing severity of storms.
 - b. Climate change affects weather patterns, which contributes to the increasing severity of storms.

ANSWER: a

POINTS: 1

31. Renewable energy is becoming more available and affordable. Fossil fuels remain our main source of energy.
- a. Renewable energy is becoming more available and affordable, yet fossil fuels remain our main source of energy.
 - b. Renewable energy is becoming more available and affordable, so fossil fuels remain our main source of energy.

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

32. The temperature of the ocean is rising rapidly. The polar ice caps are melting at an alarming rate.
- The temperature of the ocean is rising rapidly, but the polar ice caps are melting at an alarming rate.
 - The temperature of the ocean is rising rapidly, and the polar ice caps are melting at an alarming rate.

ANSWER: b

POINTS: 1

33. The hurricane warning sounded. Some people panicked.
- When the hurricane warning sounded, some people panicked.
 - The hurricane warning sounded when some people panicked.

ANSWER: a

POINTS: 1

34. Weather patterns have become unpredictable. Farmers are struggling to grow their crops.
- Farmers are struggling to grow their crops because weather patterns have become unpredictable.
 - Because farmers are struggling to grow their crops, weather patterns have become unpredictable.

ANSWER: a

POINTS: 1

Read the thesis statement. Decide if each topic sentence supports the thesis statement or not. Choose *Yes* or *No*.

"Governments should focus on moving coastal cities inland, rather than wasting resources building coastal defenses."

35. Moving key pieces of infrastructure, such as power plants and hospitals, inland, while creating storm surge barriers, which have demonstrated their ability to protect coastal cities from sudden and extreme weather events, is the most practical solution to this problem.
- Yes
 - No

ANSWER: b

POINTS: 1

LEVEL 4 Assessment Answer Key

36. Relocating inland offers a more sustainable solution, providing cities with a chance to adapt over the long term instead of relying on temporary storm surge barriers that may not even work for storms of the future.
- a. Yes
 - b. No

ANSWER: a

POINTS: 1

37. Advances in engineering and technology have led to innovative barrier designs that can adapt to changing sea levels and environmental conditions, potentially making barriers a way for cities to stay where they are.
- a. Yes
 - b. No

ANSWER: b

POINTS: 1

38. Building storm surge barriers may result in significant savings compared to the high costs associated with relocating entire cities, allowing governments to allocate resources more efficiently in the face of limited budgets.
- a. Yes
 - b. No

ANSWER: b

POINTS: 1

39. Investing in inland relocation can create economic benefits through the development of new infrastructure, job opportunities, and community revitalization, while the maintenance and repair costs of storm surge barriers might accumulate over time.
- a. Yes
 - b. No

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Complete the sentences.

- | | | |
|--|---|-------------------|
| 40. The _____ should contain an interesting hook. | ● | ● a. main |
| 41. The _____ statement should state the main points of the essay. | ● | ● b. introduction |
| 42. Each _____ paragraph should include a topic sentence and enough details. | ● | ● c. thought |
| 43. Every sentence in a paragraph should relate to the _____ idea. | ● | ● d. body |
| 44. The concluding paragraph should include a final _____. | ● | ● e. thesis |

ANSWERS: 40. b, 41. e, 42. d, 43. a, 44. c

POINTS: 5

UNITS 6–10: ADDITIONAL QUESTIONS

Match each word to its definition.

- | | | |
|----------------------|---|---|
| 1. limitation (n) | ● | ● a. the possible future effect that an action has |
| 2. associate (v) | ● | ● b. very interesting; engaging |
| 3. implication (n) | ● | ● c. very important, basic |
| 4. fundamental (adj) | ● | ● d. to connect in your mind one thing with another |
| 5. intriguing (adj) | ● | ● e. shortcoming, or a weakness |

ANSWERS: 1. e, 2. d, 3. a, 4. c, 5. b

POINTS: 5

Complete each sentence with the correct word from the box.

contradictory	prone to	stereotype	subtle	thrive
---------------	----------	------------	--------	--------

6. Howard fitted the American _____—he was open, friendly, and confident.
7. After the area was declared a national park and protected, the wildlife began to _____.
8. Some studies suggest the economy is improving, while others indicate the opposite. The results are clearly _____.
9. He is _____ raising his voice when he gets stressed. Try not to take it personally.
10. These words may sound similar, but if you listen carefully, you will notice a _____ difference.

ANSWERS: 6. stereotype, 7. thrive, 8. contradictory, 9. prone to, 10. subtle

POINTS: 5

LEVEL 4 Assessment Answer Key

Choose the correct word to complete each sentence.

11. Looking up, Isabella _____ someone running past the window.
 a. scrutinized
 b. glimpsed

ANSWER: b

POINTS: 1

12. We need to look _____ horizon and change how we think about the issue.
 a. on the
 b. beyond the

ANSWER: b

POINTS: 1

13. As trade around the world slows, many countries are concerned about the state of the _____.
 a. developing economy
 b. global economy

ANSWER: b

POINTS: 1

14. Our country has a wealth of natural resources, and that gives us a distinct _____.
 a. pattern
 b. difference
 c. advantage

ANSWER: c

POINTS: 1

15. Speakers of Hindi _____ those of Spanish by approximately 50 million.
 a. outperform
 b. outnumber
 c. outgrow

ANSWER: b

POINTS: 1

16. Without a serious global effort, the _____ for the world's rainforests is uncertain.
 a. outbreak
 b. output
 c. outlook

LEVEL 4 Assessment Answer Key

ANSWER: c

POINTS: 1

17. There are multiple cases in military history of one side using _____ to gain an advantage over the other.
- a. deceit
 - b. deceivers
 - c. deception

ANSWER: c

POINTS: 1

18. George was fired for falsely claiming to have graduated from Oxford University. The company doesn't tolerate _____ behavior.
- a. deceitful
 - b. deception
 - c. deceit

ANSWER: a

POINTS: 1

19. After watching a documentary about the discovery of an ancient shipwreck, Erik decided he wanted to study _____.
- a. biology
 - b. archeology
 - c. epidemiology

ANSWER: b

POINTS: 1

20. In a dramatic _____, the government abandoned their promise to halve carbon emissions by 2040.
- a. reversal
 - b. effect
 - c. improvement

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the passage.**The Anthropocene Age**

- A** Throughout Earth's unimaginably long 4.6-billion-year history, there have been large changes to the planet's systems, shown by the rocks and fossils found within them, which mark the end of one period and the beginning of another. These periods of geologic time stretch from the Cambrian Period over 500 million years ago, to the Jurassic Period 300 million years later when dinosaurs ruled the world, to the most recent period, the Holocene epoch.¹ The Holocene began approximately 12,000 years ago, at the end of the last ice age, and was characterized by a warm and stable climate. Its stability created the conditions for human civilization to blossom. But now, scientists believe that humans have made such an impact on the Earth that we have entered a new age: the Anthropocene, a term invented by biologist Eugene Stormer and chemist Paul Crutzen in 2000. The word is derived from the Greek words *anthropo*, which means "man," and *cene*, which means "new."
- B** How exactly do geologists decide when one age ends and another begins? Researchers study geological samples and look for changes in their composition. Often, this change can be the appearance of a fossil; dinosaur fossils, for example, signal the time of the Jurassic Period. It may also be the presence of chemicals or minerals in mud, coral, or ice. A "golden spike" is used as a physical marker to show where this feature starts to appear—that is, the point at which one age ends, and another begins. There can only be one golden spike for each age. The spike must show a clear change, and it must be possible to take different samples and get the same result.
- C** In 2009, in order to define the Anthropocene in geological terms, a body called the Anthropocene Working Group (AWG) was set up, comprising around 40 experts. After a decade of research, they reached a consensus that the Anthropocene started around 1950. This was a time characterized by massive use of resources, fossil-fuel burning, pollution, and population growth, following the end of the Second World War. It was also a time when atomic bombs were being tested, resulting in the release of huge amounts of deadly radioactivity. The period is often called the Great Acceleration, a term first used by the American environmentalist John McNeill.
- D** The next task for the AWG was to choose the ideal site for the golden spike—the place that most clearly shows the effects of increased human activity. Specifically, they were looking for the appearance of chemicals, ash from the burning of coal, carbon and nitrogen from fossil fuel burning, microplastics, and radioactivity. In many ways, this was a depressing search, as the signs they were looking for revealed the extent to which humans had negatively and irreversibly impacted the planet. In total, the AWG shortlisted a dozen candidates for this ideal site, from Australia, Japan, China, Canada, the U.S., Denmark, Italy, Poland, and the Antarctic.
- E** One such candidate was Flinders Reef, a coral formation about 240 kilometers off Australia's east coast. Coral there grows about one centimeter a year, capturing chemicals from seawater and providing an accurate record of changes to the ocean going back 300 years. Analysis of samples clearly showed the

LEVEL 4 Assessment Answer Key

presence of radioactive elements from 1957 to 1963, when above-ground atomic testing was being carried out.

- F** Another candidate was the Antarctic Peninsula Ice Sheet, where British researchers had collected ice samples preserving snowfall back to 1621. In 2012, one team drilled 133 meters down, removing the ice in meter-long sections. They took the sections back to the U.K. for analysis and found that levels of the gas methane—a powerful greenhouse gas produced by cattle, oil production, and crops such as rice—increased rapidly in the mid-1900s, reflecting the expansion of agriculture and industry at that time.
- G** A third candidate was Crawford Lake in southern Ontario, Canada. The lake is very deep and untouched by humans, and its sediments at the bottom form hundreds of layers—each representing a year. The layers can be precisely dated and reveal clear evidence of human influence on a geological timescale, including radioactive elements and ash from the burning of fossil fuels.
- H** In 2023, the AWG announced that they had chosen Crawford Lake as the ideal site for the golden spike, with its deep and undisturbed sediments. The Anthropocene has since been formally acknowledged by much of the scientific community. This represents the recognition of a new chapter in the Earth’s geological history and of how humans have made a permanent mark on the planet.

¹ **epoch:** a period of time in history

Read each statement and choose *True* or *False*.

21. The main aim of the text is to explain the methods geologists used to investigate the Anthropocene.
- a. True
 - b. False

ANSWER: a

POINTS: 1

22. The Anthropocene Working Group was set up to decide when the Anthropocene began.
- a. True
 - b. False

ANSWER: b

POINTS: 1

Choose the correct answers.

23. What is NOT true about the golden spike?
- a. It marks the start of a geological time period.
 - b. There can be a maximum of two per geological time period.

LEVEL 4 Assessment Answer Key

ANSWER: b

POINTS: 1

24. What are three examples of geological features that the AWG looked for?
- a. ash, plastics, and radioactivity
 - b. carbon, fossils, and radioactivity

ANSWER: a

POINTS: 1

25. What did the evidence from the Antarctic Peninsula Ice Sheet indicate?
- a. the testing of atomic bombs in the 1950s
 - b. increased industrial and agricultural activity

ANSWER: b

POINTS: 1

Read the extract from the passage. Which word from the extract stands out as a loaded word?

26. In 2009, in order to define the Anthropocene in geological terms, a body called the Anthropocene Working Group (AWG) was set up, comprising around 40 experts. After a decade of research, they reached a consensus that the Anthropocene started around 1950. This was a time characterized by massive use of resources, fossil-fuel burning, pollution, and population growth, following the end of the Second World War. It was also a time when atomic bombs were being tested, resulting in the release of huge amounts of deadly radioactivity.

ANSWER: deadly

POINTS: 1

LEVEL 4 Assessment Answer Key

Read the extract from the passage. Are the underlined words a simile, metaphor, or analogy?

27. This represents the recognition of a new chapter in the Earth's geological history and of how humans have made a permanent mark on the planet.
- a. simile
 - b. metaphor
 - c. analogy

ANSWER: b

POINTS: 1

Read the extract from the passage. Which three words reveal how the author feels about the impact humans have had on the planet?

28. The next task for the AWG was to choose the ideal site for the golden spike—the place that most clearly shows the effects of increased human activity. Specifically, they were looking for the appearance of chemicals, ash from the burning of coal, carbon and nitrogen from fossil fuel burning, microplastics, and radioactivity. In many ways, this was a depressing search, as the signs they were looking for revealed the extent to which humans had negatively and irreversibly impacted the planet.

- ☐ depressing
- ☐ activity
- ☐ appearance
- ☐ negatively
- ☐ ideal
- ☐ irreversibly

ANSWERS: depressing, negatively, irreversibly

POINTS: 3

LEVEL 4 Assessment Answer Key

Read the extract from the passage. Choose the paragraph that best matches the question.

29. **Paragraph 1**

How exactly do geologists decide when one age ends and another begins? Researchers study geological samples and look for changes in their composition. Often, this change can be the appearance of a fossil; dinosaur fossils, for example, signal the time of the Jurassic Period. It may also be the presence of chemicals or minerals in mud, coral, or ice. A “golden spike” is used as a physical marker to show where this feature starts to appear—that is, the point at which one age ends, and another begins. There can only be one golden spike for each age. The spike must show a clear change, and it must be possible to take different samples and get the same result.

Paragraph 2

In 2009, in order to define the Anthropocene in geological terms, a body called the Anthropocene Working Group (AWG) was set up, comprising around 40 experts. After a decade of research, they reached a consensus that the Anthropocene started around 1950. This was a time characterized by massive use of resources, fossil-fuel burning, pollution, and population growth, following the end of the Second World War. It was also a time when atomic bombs were being tested, resulting in the release of huge amounts of deadly radioactivity. The period is often called the Great Acceleration, a term first used by the American environmentalist John McNeill.

What evidence was there to decide when the Anthropocene began?

- a. Paragraph 1
- b. Paragraph 2

ANSWER: b

POINTS: 1

Read the extract from the passage. Choose the statement that best explains why the author wrote it.

30. The Anthropocene has since been formally acknowledged by much of the scientific community. This represents the recognition of a new chapter in the Earth’s geological history and of how humans have made a permanent mark on the planet.

- a. to emphasize the reality that humans have changed the Earth
- b. to highlight the fact that formal recognition takes a long time
- c. to explain that scientific proof is permanent

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the type of verbal phrase used in each sentence.

31. Watching English movies and TV shows helped me improve my listening skills considerably.
- a. infinitive
 - b. gerund used as noun
 - c. participle used as adjective

ANSWER: b

POINTS: 1

32. To understand more about why and when we don't tell the truth, we carried out a survey of over 100 people.
- a. infinitive
 - b. gerund used as noun
 - c. participle used as adjective

ANSWER: a

POINTS: 1

Which two words or phrases can replace the underlined words?

33. As Dr. Michael Roizen states, "About 40 percent of premature deaths, defined as occurring before age 75, are related to lifestyle choices—behaviors we can change."

- a. *explains* and *tells*
- b. *claims* and *informs*
- c. *says* and *points out*

ANSWER: c

POINTS: 1

34. The World Wildlife Fund (WWF) points out that "up to 15 billion trees are now being cut down every year across the world."

- a. *claims* and *states*
- b. *argues* and *informs*
- c. *feels* and *says*

ANSWER: a

POINTS: 1

LEVEL 4 Assessment Answer Key

Choose the correct word to complete each sentence.

35. The _____ of the three studies is that the underlying reasons for being dishonest are similar across cultures.
- a. support
 - b. implication
 - c. evidence

ANSWER: b

POINTS: 1

36. Research _____ that as much as 67% of mangroves, a tropical coastal tree, have been destroyed or damaged globally.
- a. shows
 - b. reports
 - c. supports

ANSWER: a

POINTS: 1

Choose the phrase that has the closest meaning to the percentage in each sentence.

37. Research suggests that at least 40% of the world's languages are in danger of disappearing.
- a. two-fifths
 - b. 1 in 4
 - c. the majority

ANSWER: a

POINTS: 1

38. Agriculture accounts for 90% of global deforestation.
- a. more than half
 - b. three quarters
 - c. the vast majority

ANSWER: c

POINTS: 1

LEVEL 4 Assessment Answer Key

Combine the sentences by writing the correct words from the box to form compound or complex sentences. There are extra options.

but	however	such as	that	which	who
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39. Life expectancy has greatly increased over the course of human history. However, living longer has led to many people suffering from chronic diseases. Examples of chronic diseases are diabetes and heart disease.

Life expectancy has greatly increased over the course of human history, _____
 living longer has led to many people suffering from chronic diseases, _____
 diabetes and heart disease.

40. Research was written by McArthur et al. in a Canadian journal. It divides the motivation for lying into 11 categories. These include lying to avoid being judged and lying to impress others.

Research _____ was written by McArthur et al. in a Canadian journal
 divides the motivation for lying into 11 categories, _____ include lying to
 avoid being judged and lying to impress others.

ANSWERS: 39. but, such as; 40. that, which

POINTS: 4

LEVEL 4 Assessment Answer Key

Read the prompt. Then write a short essay about your experience.

41. **Think about the population of your country. How has it changed? What are the current trends? How does it compare with other countries? What explains them? What are the consequences?**

A. OUTLINE

Plan an outline for your essay.

Write notes for your introduction. Include a hook, background information, and a thesis statement.

Write notes for your first body paragraph. Include a topic sentence and key details.

Write notes for your second body paragraph. Include a topic sentence and key details.

LEVEL 4 Assessment Answer Key

Write notes for your conclusion. Include a restatement of the thesis, a summary of your main points, and a final thought.

B. Think of some words and phrases you can use in your essay. Write them in the box.

The words and phrases below can be useful when writing about population trends.

- *increase, rise, decrease, decline*
- *trend, situation, perspective*
- *alleviate, challenge, suffer*
- *While ..., Although ..., As a result ...*

C. Write your essay based on your outline. Use the model to help you. Remember to use the vocabulary you wrote down.**Model:**

In 2023, the world's population reached 8 billion. It is projected to reach 9 billion by about 2040. Over the past few decades, the population in my country also rose sharply, but now, things have changed. Population growth has slowed down so much in my country that it has now gone into a gentle decline that is likely to continue for many years. But why the reversal? There are two reasons: my country's high population density and our ever-increasing cost of living.

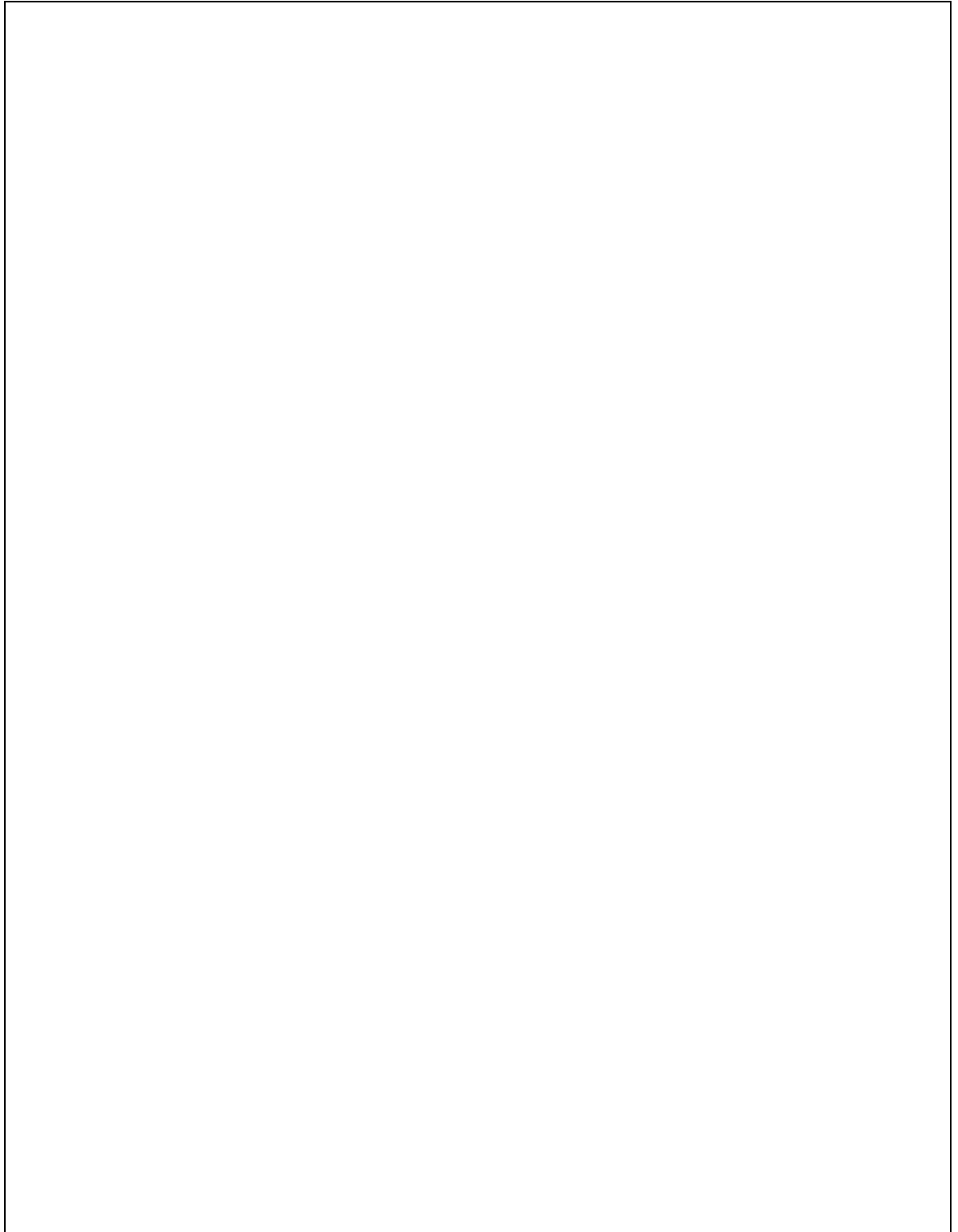
LEVEL 4 Assessment Answer Key

In the last two decades, the populations of the two main cities in my country have almost doubled. As a result, we now have too many people living there, and the cities are very crowded. This makes daily living stressful and uncomfortable. Commuting is tedious, and even short trips can take a long time because of traffic congestion. Public places are packed with people, and it is hard to get away from the crowds. Even living spaces have become smaller. Life in our cities is not as pleasant as it used to be, and fewer people want to raise children in this environment.

Because of this overcrowding, the cost of living in our cities has shot up dramatically. The cost of housing, especially, is extremely restrictive. Most people have to take on decades of debt just to buy a small one-bedroom apartment, and renting a place is not much easier. The cost of raising a child is a lot higher, too. Childcare has become very expensive, and so has the cost of education. Because of this, many of the people who still want to start a family in our cities despite the crowds can't afford to do so.

For several years, my country's population has been in decline because of how crowded and expensive our cities are. This is not a unique phenomenon. Many other developed countries are seeing similar trends. While this is worrying to many, some see it as a good thing. While we will struggle to cope economically with population decline, having fewer people around could be the key to fixing our damaged environment.

LEVEL 4 Assessment Answer Key



ANSWER: Answers will vary. See Writing Rubric.

POINTS: 12