**UNITS 1–5**

**Match each word to its definition.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | incentive (n) | ⬤ |  | ⬤ | a. | to achieve a task or a goal; to finish something |
| 2. | constraint (n) | ⬤ |  | ⬤ | b. | close, or deeply personal |
| 3. | intimate (adj) | ⬤ |  | ⬤ | c. | something that controls or limits what someone can do |
| 4. | advocate (n) | ⬤ |  | ⬤ | d. | something that motivates or encourages someone to do something |
| 5. | accomplish (v) | ⬤ |  | ⬤ | e. | a person who publicly supports a cause or an idea |

**Complete each sentence with the correct word from the box.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ambiguous | dilemma | maximize | phenomenon | stem from |

6. If we make good use of robots to automate processes, they can help us \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ workplace efficiency.

7. In my opinion, many of the problems this city faces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a lack of understanding of the core issues.

8. The government’s statement on electric vehicles was unhelpful and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It needs to be clarified.

9. Our train system is old and costly to operate, but there isn't enough in our budget to upgrade it. It's

a real \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. The use of AI to generate art is a recent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the ethical implications need to be seriously considered.

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

11. Stating that collaboration is always beneficial may be a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**general**), but it is mostly accurate.

12. When we order new cars in the future, we will be able to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**custom**) nearly everything about them to suit the user’s needs.

**Complete each sentence with the correct word.**

13. Due to \_\_\_\_\_\_\_\_\_\_ constraints, the new art gallery will not be as large as the previous one. The budget doesn’t allow it.

|  |  |
| --- | --- |
| a. | financial |
| b. | time |

14. Ideally, we'd like five people per team, but we're facing \_\_\_\_\_\_\_\_\_\_ constraints, so we're going with teams of three instead.

|  |  |
| --- | --- |
| a. | resource |
| b. | size |

15. The artist’s controversial exhibition triggered a strong \_\_\_\_\_\_\_\_\_\_ from many of the attendees.

|  |  |
| --- | --- |
| a. | investigation |
| b. | reaction |

16. The smell of freshly cut grass always triggers \_\_\_\_\_\_\_\_\_\_ of my childhood.

|  |  |
| --- | --- |
| a. | responses |
| b. | memories |

**Choose the correct word to complete each sentence.**

17. Even though Ali has a good salary, he seems to always run out of money halfway through the month. He usually ends up trying to \_\_\_\_\_\_\_\_\_\_ from his friends.

|  |  |
| --- | --- |
| a. | borrow |
| b. | lend |

18. Having finally completed the purchase of its primary rival, the company’s CEO was delighted to announce that the two businesses were no longer \_\_\_\_\_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | partners |
| b. | competitors |

19. Her photos and videos perfectly \_\_\_\_\_\_\_\_\_\_ the message that we must do everything we can to protect nature.

|  |  |
| --- | --- |
| a. | coordinate |
| b. | complement |

20. In the past two days, the number of traffic accidents has doubled. Considering the icy conditions, this is not a \_\_\_\_\_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | collision |
| b. | coincidence |

**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 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 main purpose of this text is to explain how Dr Maggie Aderin-Pocock overcame significant challenges as she tried to become a successful scientist.

|  |  |
| --- | --- |
| a. | True |
| b. | False |

22. An important concern for Dr Maggie Aderin-Pocock is how to get more young people, especially females, to choose a career in science.

|  |  |
| --- | --- |
| a. | True |
| b. | False |

**Choose the correct answers.**

23. What is true about Dr Maggie Aderin-Pocock’s experience as a black woman working in science?

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| --- | --- |
| a. | She felt she had to work harder to show others what she was capable of. |
| b. | It was easier for her to get a job in science because of her minority status. |

24. Which best describes Dr Maggie Aderin-Pocock’s opinion of the obstacles that face women in today’s society?

|  |  |
| --- | --- |
| a. | Women today face more workplace challenges than before. |
| b. | Some women are held back by their own believes. |

25. What does Dr Maggie Aderin-Pocock say about the number of women working in science?

|  |  |
| --- | --- |
| a. | Only about 20 percent are female. |
| b. | In some fields, women are well represented. |

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

|  |  |
| --- | --- |
| 26. | Dr Maggie Aderin-Pocock 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. |

What does the underlined word refer to?

|  |  |
| --- | --- |
| a. | how she overcame her difficulties in reading and writing |
| b. | the challenges she faced moving schools as well as dealing with her dyslexia |

**Read the sentences. Choose the one that contains the correct use of an appositive.**

27. a. Dr Maggie Aderin-Pocock was diagnosed with dyslexia: a condition that makes it hard to read

and write.

b. Dr Maggie Aderin-Pocock was diagnosed with dyslexia, which is a condition that makes it hard

to read and write.

**Complete the chart using the words in the box.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Accomplishments | Aspirations | Challenges | Childhood | Strengths |

|  |  |
| --- | --- |
| **Dr Maggie Aderin-Pocock:**  **A Woman in Science** | |
| 28. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Grew up in London.  - Got a telescope.  - Learned to modify it herself. |
| 29. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Had dyslexia.  - Went to 13 different schools.  - Had to work hard to prove herself as a black woman. |
| 30. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Is an excellent science communicator. |
| 31. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Given an MBE.  - Won the 2019 Women of the Year award for innovation.  - Became a TV presenter.  - Is a successful author. |
| 32. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Wants to improve female representation in science.  - This will:  - improve women's lives.  - narrow the gender pay gap.  - solve the labor shortage in various fields of science. |

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

|  |  |
| --- | --- |
| 33. | 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 school children in the U.K. and elsewhere. |

|  |  |
| --- | --- |
| a. | as a way of finishing a task |
| b. | in order to achieve the stated goal |

**Complete each sentence with the correct word.**

34. Most modern offices are designed to encourage people to collaborate. Research suggests that such

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ usually leads to greater productivity.

35. As cities become larger and more densely populated, they face significant challenges.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ include providing good quality housing, efficient transportation, and sufficient green spaces.

**Choose the correct noun phrase to complete each sentence.**

36. Speed painting—\_\_\_\_\_\_\_\_\_\_—is a popular art technique for painters of all levels.

|  |  |
| --- | --- |
| a. | giving yourself a limited amount to time to complete a piece of work |
| b. | designing and completing a project within two days |

37. Ava’s most recent work deadline—\_\_\_\_\_\_\_\_\_\_—proved to be extremely challenging.

|  |  |
| --- | --- |
| a. | giving yourself a limited amount to time to complete a piece of work |
| b. | designing and completing a project within two days |

**Choose the correct word to complete each sentence.**

38. Airline revenues fell by about 60 percent globally in 2020, \_\_\_\_\_\_\_\_\_\_ the COVID pandemic spread throughout the world.

|  |  |
| --- | --- |
| a. | when |
| b. | where |
| c. | whose |

39. Hajime works for a Japanese multinational corporation \_\_\_\_\_\_\_\_\_\_ annual profits exceed $30 billion.

|  |  |
| --- | --- |
| a. | that |
| b. | which |
| c. | whose |

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

40. Ai Weiwei is a famous Chinese artist who was born in 1957 in Beijing.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Ai Weiwei is a famous Chinese artist.

**Choose the best synonym for each underlined word.**

41. Electric planes have the potential to transform the aviation industry.

|  |  |
| --- | --- |
| a. | improve |
| b. | convert |
| c. | revolutionize |

42. In the 2010s, internet speeds improved to the extent that remote work became viable.

|  |  |
| --- | --- |
| a. | justifiable |
| b. | feasible |
| c. | sustainable |

**Read the prompt. Then write an essay about public transportation.**

43. **Think about how people in your town, city, or country get around. Imagine it is your job to improve the transportation system. What would you do? Choose one or two areas you would change. Briefly explain the problem, what you would do, and why.**

**A. OUTLINE**

**Plan an outline for your essay.**

Write a thesis statement that states your position clearly. Include your main supporting points.

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Write down topic sentences for each of your body paragraphs. Note down key details.

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Write notes for your concluding paragraph. Restate your thesis and summarize your main points.

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**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 transportation.

* *problem, issue, challenge, situation*
* *traffic, congestion, rush hour*
* *result in, lead to, cause, provide, improve, encourage, discourage*
* *transportation system/network*
* *affordable, viable, feasible*

|  |
| --- |
|  |

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

**Model:**

*I live in a big city, and traffic congestion is a serious problem. For most of the day, it can take hours just to travel a few kilometers. This is not only a huge waste of time; it also results in very poor air quality, which negatively impacts residents’ health. There are various ways the situation could be improved, but in this essay, I will focus on what I feel are the two most important solutions: improving public transportation and discouraging people from driving.*

*Providing better public transportation is perhaps the most obvious solution because it has been proven to work around the world. People will switch to public transportation if it is clean, comfortable, and—most importantly—reliable. More buses and trains and an expanded subway system are essential. Trains and buses will have to run regularly and punctually, be counted on not to break down, and conveniently connect people to all parts of the city. For this to happen, planning, coordination, and a long-term view are essential. Keeping public transportation affordable is also crucial for public transportation to truly catch on.*

*In addition, we should also discourage people from using cars. Most working adults in my city drive to work because our public transportation system isn’t up to scratch. However, it isn’t enough to just create an incentive for people to drive less by improving public transportation. We also need policies to make driving or owning a car less practical. For example, we could ban cars from entering the town center. The roads there could then be redesigned to accommodate pedestrians, cyclists, and people on e-scooters. This would significantly discourage people from driving, which would improve congestion.*

*There are many ways to improve traffic in cities, but for my city, I believe the best way forward is to not only improve public transportation but also actively discourage driving. These solutions would not only help reduce carbon emissions; they would lead to better air quality, improve productivity, and make the city more pleasant for everyone.*

|  |
| --- |
|  |

(12 points)