**UNITS 6–10**

**Match each word to its definition.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | logical (adj) | ⬤ |  | ⬤ | a. | to use a resource like fuel, food, or time |
| 2. | consume (v) | ⬤ |  | ⬤ | b. | an unpleasant feeling or feeling of mild pain |
| 3. | discomfort (n) | ⬤ |  | ⬤ | c. | a very dangerous time or situation |
| 4. | acquire (v) | ⬤ |  | ⬤ | d. | to get something |
| 5. | crisis (n) | ⬤ |  | ⬤ | e. | using reason |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| crucial | distinguish | injury | reject | terrifying |

6. When we discuss climate change, it is important to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between climate and weather.

7. Before treating a serious illness, getting an accurate diagnosis is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8. Climbing tall mountains comes with a risk of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and sometimes even death.

9. All new ideas are worth considering—we shouldn’t \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ any of them in the early stages.

10. Last year, I experienced a major earthquake firsthand. It was truly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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

11. I’ve just finished reading a fascinating \_\_\_\_\_\_\_\_\_\_ of a famous mountain climber.

|  |  |
| --- | --- |
| a. | autograph |
| b. | autobiography |

**Choose the correct definition of the underlined phrasal verb.**

12. I believe what you have said is true and am happy to back you up.

|  |  |
| --- | --- |
| a. | support |
| b. | reverse |
| c. | make a copy |

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

13. We have been trying to make this design idea work for months, but we have made no progress. I think we should cut \_\_\_\_\_\_\_\_\_\_ and start over.

|  |  |
| --- | --- |
| a. | corners |
| b. | our losses |

14. As a mountaineer, I cut \_\_\_\_\_\_\_\_\_\_ climbing some small mountains in the French Alps.

|  |  |
| --- | --- |
| a. | my teeth |
| b. | across |

**Choose the correct synonym of the underlined word in each sentence.**

15. These days, it can be hard to keep up with the constant changes in computer technology.

|  |  |
| --- | --- |
| a. | tracked |
| b. | combined |
| c. | continuous |

16. This latest report by the United Nations clearly shows that the number of languages in the world is decreasing.

|  |  |
| --- | --- |
| a. | joins |
| b. | indicates |
| c. | monitors |

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

17. In many countries, children grow up \_\_\_\_\_\_\_\_\_\_\_. Studies show this is a good thing—we now know that speaking more than one language has various benefits.

|  |  |
| --- | --- |
| a. | multipurpose |
| b. | multilingual |
| c. | monolingual |

18. We were woken up last night by a loud \_\_\_\_\_\_\_\_\_\_. It sounded like a big firework going off!

|  |  |
| --- | --- |
| a. | ding |
| b. | bang |
| c. | swoosh |

19. If you and your friends get into a dangerous situation, it is a good idea to stay \_\_\_\_\_\_\_\_\_\_. That way you can help each other.

|  |  |
| --- | --- |
| a. | together |
| b. | inside |
| c. | still |

**Choose the correct form of the word to complete the sentence.**

20. As the sea level rises, the governments of some low-lying islands may eventually be forced to order the \_\_\_\_\_\_\_\_\_\_ of residents.

|  |  |
| --- | --- |
| a. | evacuate |
| b. | evacuation |

**Read the passage.**

|  |
| --- |
| **Innovations in Medical Treatments**  Electricity is transforming medicine. While previous treatments usually involved surgery to put electrodes1 inside the brain, scientists are now beginning to treat people without surgery, placing electrodes on specific parts of the body instead. Recent medical advances suggest that electricity could treat conditions like paralysis, Parkinson’s disease, depression, and autoimmune conditions—where the immune system goes wrong and attacks healthy cells.  **Paralysis** A car accident in 2019 left Sharon Laudsi unable to move or feel her left thumb. Researchers at the Feinstein Institutes for Medical Research, New York, explained to Laudsi that they might be able to heal her thumb. They placed a patch with about 100 electrodes on the back of her neck. For two months, Laudsi visited the lab every week for an hour of treatment, which stimulated nerves traveling down her spinal cord to her thumb. Within a few weeks, she was able to move her thumb. Nine months later, she regained her sense of feeling in her thumb.  **Parkinson’s Disease** A technique in which an electrode is put deep in the brain, called deep brain stimulation (DBS), can treat patients with Parkinson’s. The disease attacks and kills nerve cells that produce the chemical dopamine.2 The reduced amount of dopamine causes symptoms of Parkinson’s. Researchers have discovered that using an electrode to deliver electricity to the part of the brain affected can stimulate the remaining nerve cells to release more dopamine than they normally would. This helps to reduce symptoms.  **Depression** Several studies into the use of electricity to reduce symptoms of depression have shown promising results. In one large study, over 50 percent of the patients showed dramatic improvements in their depression. In 2020, Sameer Sheth, neurosurgeon at the Baylor College of Medicine, in Texas, and his team worked with a patient: a 37-year-old man with severe depression. They began with a careful analysis to see which areas of the brain seemed to be causing the depression. Then they placed electrodes in specific parts of his brain and started treatment. After about five months, his depression was gone. When the scientists stopped the treatment, the man’s depression returned. Further treatment once again reduced his symptoms, suggesting the treatment was effective.  **Autoimmune Conditions** Autoimmune diseases occur when a person’s immune system destroys their own healthy tissue, causing inflammation. There are drugs that can help, but those drugs don’t work for every patient. Neurosurgeon Kevin Tracey and his team at the Feinstein Institutes for Medical Research focused on the vagus nerve, which travels from the brain to the large intestine. Animal studies showed that if the vagus nerve is cut, inflammation can increase, which makes autoimmune diseases worse. Tracey and his team developed a small device that is placed inside the neck. By using the device to stimulate the vagus nerve, the autoimmune disease symptoms were reduced. Studies are now testing the treatment to see if it can help a range of conditions, from COVID-19 to chronic pain.  Michael Levin, a biologist and computer scientist at the Wyss Institute in Boston, points out that every cell in the body communicates via electricity, and that this influences how cells grow and work together. Levin is working to use electronic signals in different areas of the body to encourage cells to work together to heal or regrow. He and his team have already done research on frogs. They found that by choosing different drugs that would create the right electrical state for regrowing a limb, they could stimulate a frog to start regrowing a leg after it had been cut off.  In the coming decades, it is anticipated that electricity will be used to treat multiple conditions. Levin points out that current treatments are just the beginning. “I just want people to understand this is the tip of the iceberg,” he says. The future of medicine and its use of electricity to help people seems bright.  1 **electrode**: a small solid piece, usually made of metal, that carries an electric current  2 **dopamine**: a chemical that influences nerve cells in the brain and body |

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

21. Electricity is likely to be used to treat a wide range of physical and mental illnesses in the future.

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

22. The main purpose of the article is to describe how scientists will be able to treat people using electricity, without the need for surgery.

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

**Choose the correct answers.**

23. What did the study by neurosurgeon Sameer Sheth suggest?

|  |  |
| --- | --- |
| a. | Mental illnesses can be treated with electricity. |
| b. | The symptoms of Parkinson’s can be reduced by electricity treatment. |

24. What connection between the vagus nerve and autoimmune disease is described by the text?

|  |  |
| --- | --- |
| a. | Stimulating the vagus nerve can reduce inflammation caused by autoimmune disease. |
| b. | Cutting the vagus nerve can reduce the symptoms of autoimmune diseases. |

25. In the future, who might benefit from the work being done by Michael Levin?

|  |  |
| --- | --- |
| a. | people who are suffering from paralysis |
| b. | people who have lost part of a limb |

**Choose the correct word to make a sentence that uses speculation.**

26. People who have lost an arm or hand \_\_\_\_\_\_\_\_\_\_ be able to grow a new one in the future.

|  |  |
| --- | --- |
| a. | will |
| b. | might |

**Read the passage.**

|  |
| --- |
| **Innovations in Medical Treatments**  Electricity is transforming medicine. While previous treatments usually involved surgery to put electrodes1 inside the brain, scientists are now beginning to treat people without surgery, placing electrodes on specific parts of the body instead. Recent medical advances suggest that electricity could treat conditions like paralysis, Parkinson’s disease, depression, and autoimmune conditions—where the immune system goes wrong and attacks healthy cells.  **Paralysis** A car accident in 2019 left Sharon Laudsi unable to move or feel her left thumb. Researchers at the Feinstein Institutes for Medical Research, New York, explained to Laudsi that they might be able to heal her thumb. They placed a patch with about 100 electrodes on the back of her neck. For two months, Laudsi visited the lab every week for an hour of treatment, which stimulated nerves traveling down her spinal cord to her thumb. Within a few weeks, she was able to move her thumb. Nine months later, she regained her sense of feeling in her thumb.  **Parkinson’s Disease** A technique in which an electrode is put deep in the brain, called deep brain stimulation (DBS), can treat patients with Parkinson’s. The disease attacks and kills nerve cells that produce the chemical dopamine.2 The reduced amount of dopamine causes symptoms of Parkinson’s. Researchers have discovered that using an electrode to deliver electricity to the part of the brain affected can stimulate the remaining nerve cells to release more dopamine than they normally would. This helps to reduce symptoms.  **Depression** Several studies into the use of electricity to reduce symptoms of depression have shown promising results. In one large study, over 50 percent of the patients showed dramatic improvements in their depression. In 2020, Sameer Sheth, neurosurgeon at the Baylor College of Medicine, in Texas, and his team worked with a patient: a 37-year-old man with severe depression. They began with a careful analysis to see which areas of the brain seemed to be causing the depression. Then they placed electrodes in specific parts of his brain and started treatment. After about five months, his depression was gone. When the scientists stopped the treatment, the man’s depression returned. Further treatment once again reduced his symptoms, suggesting the treatment was effective.  **Autoimmune Conditions** Autoimmune diseases occur when a person’s immune system destroys their own healthy tissue, causing inflammation. There are drugs that can help, but those drugs don’t work for every patient. Neurosurgeon Kevin Tracey and his team at the Feinstein Institutes for Medical Research focused on the vagus nerve, which travels from the brain to the large intestine. Animal studies showed that if the vagus nerve is cut, inflammation can increase, which makes autoimmune diseases worse. Tracey and his team developed a small device that is placed inside the neck. By using the device to stimulate the vagus nerve, the autoimmune disease symptoms were reduced. Studies are now testing the treatment to see if it can help a range of conditions, from COVID-19 to chronic pain.  Michael Levin, a biologist and computer scientist at the Wyss Institute in Boston, points out that every cell in the body communicates via electricity, and that this influences how cells grow and work together. Levin is working to use electronic signals in different areas of the body to encourage cells to work together to heal or regrow. He and his team have already done research on frogs. They found that by choosing different drugs that would create the right electrical state for regrowing a limb, they could stimulate a frog to start regrowing a leg after it had been cut off.  In the coming decades, it is anticipated that electricity will be used to treat multiple conditions. Levin points out that current treatments are just the beginning. “I just want people to understand this is the tip of the iceberg,” he says. The future of medicine and its use of electricity to help people seems bright.  1 **electrode**: a small solid piece, usually made of metal, that carries an electric current  2 **dopamine**: a chemical that influences nerve cells in the brain and body |

**Choose the correct answer.**

27. Which statement best describes the author’s attitude toward the use of electricity in medicine?

|  |  |
| --- | --- |
| a. | The author is optimistic that electricity will be used to treat various medical conditions. |
| b. | The author believes that scientists should focus their work on treatments that don’t involve surgery. |
| c. | The author thinks that electricity is unlikely to be effective for treating the symptoms of serious depression. |

**Read the sentence. Then match it with the most accurate description.**

28. The vagus nerve stimulation approach is already being used to help with recovery after a stroke and to control inflammation.

|  |  |
| --- | --- |
| a. | The agent is not mentioned because it is unknown. |
| b. | The agent is not mentioned because it is obvious or unimportant. |
| c. | The sentence has an agent. |

**Read the sentence from the passage. Choose the sentence that correctly expresses the level of certainty.**

29. In the coming decades, it is anticipated that electricity will be used to treat multiple conditions.

|  |  |
| --- | --- |
| a. | It is likely that electricity will be used to treat multiple conditions. |
| b. | It is possible that electricity will be used to treat multiple conditions. |
| c. | It is certain that electricity will be used to treat multiple conditions. |

**Read the extract from the passage. Choose the sentence that best paraphrases the underlined part.**

30. Levin points out that current treatments are just the beginning. “I just want people to understand this is the tip of the iceberg,” he says.

|  |  |
| --- | --- |
| a. | This is the most obvious part of something. |
| b. | This is the most important part of something. |
| c. | This is a small part of something much bigger. |

**Choose the answer that best paraphrases each sentence.**

31. *Technology will certainly be used more and more to design all kinds of products.*

Technology is \_\_\_\_\_\_\_\_\_\_ going to be used more and more to design all kinds of products.

|  |  |
| --- | --- |
| a. | unlikely |
| b. | probably |
| c. | no doubt |

32. *It’s possible that more and more cities will limit the numbers of tourists in the coming years.* \_\_\_\_\_\_\_\_\_\_ that more and more cities will limit the numbers of tourists in the coming years.

|  |  |
| --- | --- |
| a. | There’s no way |
| b. | The chances are |
| c. | There’s no chance |

**Choose the correct sentence.**

33. a. Spanish, that is the fourth most spoken language in the world, has about 560 million speakers.

b. Spanish which is the fourth most spoken language in the world has about 560 million speakers.

c. Spanish, which is the fourth most spoken language in the world, has about 560 million speakers.

34. a. Avocados are one type of food that is affected by climate change.

b. Avocados are one type of food who is affected by climate change.

c. Avocados are one type of food, which is affected by climate change.

**Choose the quote that fits grammatically into each sentence.**

35. According to U.K. climate expert Jon Burke, cities urgently need more greenery to slow the rate of urban warming. He points out that vegetation has \_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| a. | “big role to play.” |
| b. | “a big role to play.” |

36. Food sustainability expert Raj Patel explains that people working in industrial farming \_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| a. | "know how much their business has driven the climate crisis." |
| b. | "knowing how much their business has driven the climate crisis." |

**Read the statements and identify which part is the main argument and which is the counterargument. Choose *Main Argument* or *Counterargument*.**

|  |
| --- |
| AI will be able to help treat a wide range of medical conditions and research should be encouraged. However, AI carries risks and development must be handled very carefully. |

37. AI will be able to help treat a wide range of medical conditions and research should be encouraged.

|  |  |
| --- | --- |
| a. | Main Argument |
| b. | Counterargument |

38. AI carries risks and development must be handled very carefully.

|  |  |
| --- | --- |
| a. | Main Argument |
| b. | Counterargument |

**Write the correct form of the words in parentheses to complete the sentence.**

39. No one had \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**successful**) climbed to the peak of the mountain

until Tenzing Norgay and Edmund Hillary \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**reach**) the top in 1953.

**Read the prompt. Then write a short paragraph with your ideas.**

40. **Think about your country. What is one thing your government could do to help build a more sustainable future? Give at least two reasons why.**

**A. OUTLINE Plan an outline for your paragraph.**

Include a topic sentence that expresses the main idea.

|  |
| --- |
|  |

Add supporting ideas and some details that provide examples or more information.

|  |
| --- |
|  |

Add ideas for a concluding sentence that is an opinion, a prediction, a question, or a restatement of the main idea.

|  |
| --- |
|  |

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

The words and phrases below can be useful when writing about steps to a sustainable future.

* *sustainable*
* *renewable, nuclear energy*
* *fossil fuels*
* *sufficient*
* *provide, build, lead to*
* *carbon emissions*
* *climate change*

|  |
| --- |
|  |

**C. Write your paragraph based on your outline. Use the model to help you. Remember to use the language you wrote above.**

**Model:**

*One thing that the government of my country could do to help build a sustainable future is to invest more in nuclear energy. The government is already working to increase the amount of renewable energy, and while that is good, it will not be sufficient for our needs. I believe that nuclear energy is the answer. Recent advances mean that some nuclear energy is much safer than before. Nuclear energy is clean and there are no direct carbon emissions, unlike energy from fossil fuels like coal, oil, and gas. It doesn’t depend on the weather and can provide all the energy we need whenever we want. In my opinion, a combination of renewable energy and nuclear energy will lead the way to a sustainable future, providing the power we need.*

|  |
| --- |
|  |

(12 points)