**UNIT 2**

**Match the words with the example sentences.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | disease | ⬤ |  | ⬤ | a. | I used parts from an old bicycle to build a leg-powered washing machine. |
| 2. | prevention | ⬤ |  | ⬤ | b. | I got malaria from a mosquito bite, and I was treated at the hospital. |
| 3. | innovation | ⬤ |  | ⬤ | c. | One good thing about being out in the sunshine is that it boosts my mood. |
| 4. | effort | ⬤ |  | ⬤ | d. | I spent many long hours studying and worked very hard to get a university degree. |
| 5. | benefit | ⬤ |  | ⬤ | e. | I drive carefully and wear a seat belt to avoid accidents or injuries on the road. |

**Complete the paragraph with the correct words.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| afford | install | power | store | struggle |

6. Caleb couldn’t \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an expensive new cell phone, so he bought a cheap used one. The charging cord would not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the phone at first, so he had to replace it. Once he got it to work, he tried to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ some new apps, such as one to track his exercise and sleep. However, they didn’t work with his phone because it was old, so he had to remove them. He was also unable to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ more than a few of the photos or videos that he took because the phone didn’t have enough memory. Finally, Caleb didn’t want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with his phone anymore, so he sold it and

bought a better one.

**Complete the sentences with the correct phrases.**

|  |  |  |
| --- | --- | --- |
| full power | power failures | solar power |

7. When the oven reaches \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it can cook a pizza in eight minutes.

8. Using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is better for the environment than burning fossil fuels.

9. Due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in our neighborhood, we had to use candles for lights, and we couldn’t charge our phones.

**Complete each adjective with the correct ending. Write *able* or *ible*.**

10. This power charger is not compat\_\_\_\_\_\_\_\_\_\_ with my cell phone.

11. Traveling to other countries is not afford\_\_\_\_\_\_\_\_\_\_ for many people.

12. The Internet makes it poss\_\_\_\_\_\_\_\_\_\_ for people to connect with friends around the world.

**Read the passage.**

|  |
| --- |
| **The Power of Creativity**  **A**William Kamkwamba lives in Malawi, Africa, where a lot of people don’t have access to electricity or running water. They have to cook over open fires, collect water from wells or streams, and grow their own food. Life is difficult, and many people struggle to survive.  **B**In 2001, when William was 14, there was a severe drought in Malawi. Most families couldn’t grow enough food. He explains, “Within five months all Malawians began to starve to death. My family ate one meal per day, at night.”  **C**Because of the drought, William’s family couldn’t afford to send him to school anymore. However, William wanted to continue his education, so he went to the library. He found a science book there called Using Energy. It included instructions for building a windmill. Windmills can be very efficient sources of electricity, and they can bring water up from underground. William didn’t know much English, but the book was full of pictures and diagrams. William thought he could build a windmill for his family.  **D**When William went home and started building his windmill, a lot of people in his village laughed at him. However, William was confident. He saw the photo of the windmill in the book. Someone else was able to build it, so he knew he could build it, too. William was also creative. He didn’t have the parts and equipment that he saw in the book’s diagrams. So he looked for the parts that he needed in junkyards.  **E**While building the windmill, William changed and improved his design. At first, the windmill powered only one lightbulb. Eventually, there was enough electricity for four lights and a radio. No one laughed at William after that, and people in his village started to come to his house to get power for their cell phones. Later, William built a second windmill. This one brought water up from underground. After that, he began to teach other people how to build windmills. He also continued to build more of them himself, including one at a primary school.  **F**Because of his success, William was able to go back to school. He also helped to develop a malaria prevention program and clean water services in his community. He wrote a book about his life called The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope. In 2019, the book was adapted into a movie starring award-winning actor Chiwetel Ejiofor.  **G** William is now working to build a center in Malawi that will support young people trying to tackle problems in their communities. In addition, he uses his website to educate people and to give them hope. His main message is this: “To the Africans, and the poor who are struggling with your dreams …, trust yourself and believe. Whatever happens, don’t give up.” |

**Choose the correct answers.**

13. What is the passage mostly about?

|  |  |
| --- | --- |
| a. | how a teenage boy brought electricity and better health to his village |
| b. | the problems that people face in rural Malawi |
| c. | the ways windmills can produce electrical power and supply water |

14. Which of these best describes what a *diagram* is?

|  |  |
| --- | --- |
| a. | a book containing a lot of pictures |
| b. | an explanation in another language |
| c. | a drawing that shows how a device works |

15. How did William get the parts and equipment he needed?

|  |  |
| --- | --- |
| a. | He made them. |
| b. | He bought them. |
| c. | He found them. |

16. Read the sentence from paragraph **E**. Why did people stop laughing at William?

*No one laughed at William after that, and people in his village started to come to his house to get power for their cell phones.*

|  |  |
| --- | --- |
| a. | They now understood that William’s idea was not silly, as they had first believed. |
| b. | They wanted to be friends with William because he lived in a very nice house. |
| c. | They knew they had hurt William’s feelings, and they felt sorry about it. |

17. Which of the following is NOT something William has done to help his community?

|  |  |
| --- | --- |
| a. | taught people how to build their own windmills |
| b. | opened a new library for children |
| c. | helped to develop clean water services |

**Read the passage.**

|  |
| --- |
| **Solar Cookers**  **A**Solar cookers provide solutions to many problems in developing countries. They are inexpensive, they help prevent air pollution and loss of forests, and they make the lives of women and girls easier. No wonder development agencies have encouraged their use in many regions of the world.  **B**The design of solar cookers is not complicated. Basically, shiny sheets of metal reflect sunlight onto a dark pot which contains the food to be cooked. The dark pot turns light waves from the sun into heat energy. The heat is stored inside the pot and cooks the food. The materials for this equipment are not expensive, so people can easily afford solar cookers. The sunlight is free, so there is no need to spend money on fuel.  **C**Traditionally, women and girls have gathered wood to burn as cooking fuel. As wood supplies become smaller, the women have to walk further to find enough wood. They often take their daughters out of school to help them gather wood. Gathering wood takes a lot of the women's time. In addition, forests have been lost because trees cannot grow quickly enough to replace the cut wood. By contrast, solar cookers can be used again and again without harming the environment. The sun provides the energy for cooking, so wood is no longer needed. And because wood is no longer needed, women and girls don’t have to go collect it.  **D**Another problem with traditional wood stoves is the cooking fires themselves. Smoke from the fires causes eye and breathing problems. The World Health Organization (WHO) reports that over two million women and children die each year from the pollution of indoor cooking fires. By contrast, solar cookers are used outdoors and create no pollution.  **E**Clean water is another benefit of solar stoves. People can use the stoves to heat water to a high temperature. This kills germs that cause diseases. A simple thermometer shows when the correct temperature has been reached. Then people know the water is safe to drink. This process prevents diseases in areas where people don't have access to healthy drinking water.  **F**Despite the many advantages, there are a few problems with solar cookers. First, they don't work at night or when it's raining. Secondly, it takes longer for food to cook than the traditional method of cooking over a wood fire. It also takes longer for water to boil and to be hot enough to be safe to drink. However, the health and environmental advantages of solar cookers make these adjustments worth it.  **G** Solar cookers are a cheap and efficient way to cook without harming forests or creating pollution. Women have more time for other tasks, and girls can continue their education. The ability to provide safe drinking water improves the health of the whole community. It's an invention that has significant benefits for everyone. |

**Choose *True* or *False*.**

18. One of the goals of development agencies is to improve the lives of women and girls.

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

19. Solar cookers do not require any fuel except sunlight.

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

20. Solar cookers cook food faster than traditional methods such as wood fires.

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

21. Solar cookers do not get hot enough to boil water.

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

22. The main idea of this passage is that solar cookers are better than traditional cooking methods in every way.

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

**Choose all the correct answers.**

23. What is the main idea of paragraph **C**?

|  |  |  |
| --- | --- | --- |
|  |  | Solar cookers are better for the environment and the community than traditional wood fuel. |
|  |  |  |
|  |  | Gathering wood for fires takes a lot of women’s time and effort. |
|  |  |  |
|  |  | Cutting wood for fuel leads to losing forests. |
|  |  |  |
|  |  | Solar cookers do not require wood, but only the sun’s energy. |

24. Which of the following are details that support the main idea of paragraph **C**?

|  |  |  |
| --- | --- | --- |
|  |  | Gathering wood for fires requires a lot of women’s time and effort. |
|  |  |  |
|  |  | Solar cookers are better for the environment and the community than traditional wood fuel. |
|  |  |  |
|  |  | Cutting wood for fuel leads to losing forests. |
|  |  |  |
|  |  | Solar cookers do not require wood, but only the sun’s energy. |

**Choose all the correct answers.**

25. What is the main idea of paragraph **F**?

|  |  |  |
| --- | --- | --- |
|  |  | Solar cookers don’t work in the rain. |
|  |  |  |
|  |  | Water is slower to boil and become safe to drink in a solar cooker. |
|  |  |  |
|  |  | Solar cookers are really great, but they aren’t perfect. |
|  |  |  |
|  |  | Cooking with a solar cooker is slower than cooking with a wood fire. |

26. What details support the main idea of paragraph **F**?

|  |  |  |
| --- | --- | --- |
|  |  | Solar cookers don’t work in the rain. |
|  |  |  |
|  |  | Cooking with a solar cooker is slower than cooking with a wood fire. |
|  |  |  |
|  |  | Water is slower to boil and become safe to drink in a solar cooker. |
|  |  |  |
|  |  | Solar cookers are really great, but they aren’t perfect. |

**Complete each sentence with the simple past tense of the verb in parentheses.**

27. Most people \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**not / have**) phones in their homes until the early 1900s.

28. Alexander Graham Bell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**invent**) the telephone in 1876.

29. Bell’s phone company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**buy**) many smaller companies in order to increase its market share.

30. Between 1880 and 1910, the number of people with telephones \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**grow**) from 49,000 to 2.2 million.

31. The Motorola company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**make**) the first cell phones in 1973.

32. The first cell phones \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**not / be**) slim, light, or equipped with cameras or apps.

**Read the topic sentence. Decide if the other sentence is a supporting idea or a detail. Choose the correct answer.**

|  |
| --- |
| **Topic sentence**: Early telescopes helped astronomers to see distant stars and planets and create theories about Earth's place in the solar system. |

33. Firstly, Galileo used a telescope to argue that the sun—not the Earth—was the center of our solar system.

|  |  |
| --- | --- |
| a. | Supporting Idea |
| b. | Detail |

34. Galileo’s telescope was modeled on an earlier invention by a Dutch maker of eyeglasses in 1608.

|  |  |
| --- | --- |
| a. | Supporting Idea |
| b. | Detail |

35. Galileo’s observations caused much debate, but they were finally accepted and helped change the field of astronomy.

|  |  |
| --- | --- |
| a. | Supporting Idea |
| b. | Detail |

36. Shortly after that, another astronomer named Johannes Kepler argued that the planets, including Earth, move in curved paths called ellipses around the sun and that they move faster when they are closer to the sun.

|  |  |
| --- | --- |
| a. | Supporting Idea |
| b. | Detail |

37. Kepler used a telescope to observe the planets, but he also relied on data collected by the Danish astronomer Tycho Brahe, who had made his observations before the invention of the telescope.

|  |  |
| --- | --- |
| a. | Supporting Idea |
| b. | Detail |

**Complete the paragraph with the missing parts. Write A–E.**

|  |
| --- |
| **A** fresh food at a steady cold temperature, preventing germs and mold from growing  **B** these methods were not as efficient at keeping food cold  **C** the modern refrigerator has had a huge impact on our lives for two main reasons  **D** refrigerators made an impact is that they led to the rise of supermarkets, which carry a wide variety  of food  **E** food is safer, and there is less food waste |

38. The invention of \_\_\_\_\_\_. Firstly, it keeps \_\_\_\_\_\_. This means \_\_\_\_\_\_. It also means we can keep more fresh ingredients at home for when we need them. Before the electric refrigerator, people used other methods of keeping food cool, such as ice boxes and underground cellars. However, \_\_\_\_\_\_. The second reason \_\_\_\_\_\_. Before modern refrigeration, people shopped at small local grocery stores and

markets, which had less variety and fewer processed foods.

**You are going to write a paragraph on one of the following topics.**

39. **Discuss your experiences with one of these two topics.**

**Topic 1:** Describe a device or new invention that has changed your life. When did you discover this invention? How did it change or affect your life? Why do you think this is an important invention?

**Topic 2:** Describe a time when you or someone you know solved a problem.

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

Include ideas for a topic sentence, supporting ideas, and details.

|  |
| --- |
|  |

**B. Think of some vocabulary words and phrases, as well as past tense verbs, that you can use in your paragraph. Write them in the box.**

The words and phrases below can be useful when writing about an important invention and how it helped you.

* *benefit*
* *design*
* *dramatically*
* *efficient*
* *innovation*
* *valuable*
* *changed*
* *improved*
* *made*
* *took*

|  |
| --- |
|  |

**C. Write your paragraph based on your outline. Use the model to help you. Remember to use the vocabulary and past tense verbs you wrote down.**

**Model:**

*For me, the invention of AI (Artificial Intelligence) is the most important innovation in my lifetime. First of all, it dramatically changed the way I did research for school and in my regular life. Before AI, I had to do many searches on the internet to find a single piece of information that I needed. This took a lot of time and energy, and I often got frustrated. When AI assistants and chatbots came along, I could find explanations or answers to questions in seconds—sometimes by asking a question out loud. Another way AI changed things for me was in the area of art. Before AI, I mostly drew by hand or used a computer drawing app. I still create manga comics this way, but now I can also create really fun and interesting art using AI prompts. Finally, AI inspired me to change my college major. When I was in middle school, I wanted to be an artist or a teacher. However, I am so fascinated by AI that I’ve decided to study computer programming instead. Maybe I will make the next intelligent robot!*

|  |
| --- |
|  |

(12 points)