

## Electricity & Energy

### Energy

All life depends on energy. The Earth and our solar system get most of their energy from the sun. Without the sun, life on Earth would not exist. The sun shines on plants, giving them the energy they need to grow and thrive. Animals then eat the plants, which gives them energy, too. Energy is everywhere. It is all around us.

Energy comes from nature. Wind, sun, water, fire, and lightning are all sources of energy. In the United States, the most used sources of energy are fossil fuels such as coal and oil. The energy from fossil fuels gives us most of the electricity that lights and heats our homes. Oil also gives us the gasoline that runs our cars. Unfortunately, the burning of fossil fuels **pollutes**<sup>1</sup> the air.

Scientists are working to develop new ways of providing energy without harming the Earth. Through advances in research of alternative energy sources, the world is slowly changing from using fossil fuels to using wind power, water power, and **solar**<sup>2</sup> energy. Windmills are used to capture wind power. Dams help to **harness**<sup>3</sup> the energy from water. Solar panels collect energy from the sun's rays and keep it stored for future use.

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<sup>1</sup> **pollutes** – spoils (as a natural resource) with waste made by humans

<sup>2</sup> **solar** – coming from the sun

<sup>3</sup> **harness** – to put to work, utilize

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Energy on Earth comes from
  - a. other planets.
  - b. the sun.
  - c. plants.
  - d. the moon.
  
2. The passage describes the problem of fossil fuels causing pollution. What is a solution in the passage for this problem?
  - a. using gasoline in cars
  - b. using alternative energy sources
  - c. making oil illegal
  - d. promoting bicycle programs
  
3. All of the following have to do with new advances in energy *except*:
  - a. wind power.
  - b. water power.
  - c. solar energy.
  - d. lightning.
  
4. Read the following sentence: "The sun shines on plants, giving them the energy they need to grow and thrive."

The word **thrive** means

  - a. wilt
  - b. be born
  - c. live well
  - d. plant seeds.
  
5. This passage is mostly about
  - a. where energy comes from and how it is used.
  - b. how wind energy is different from fossil fuels.
  - c. how plants use the sun's energy.
  - d. why fossil fuels cause harm to the Earth.

6. What sources of energy does the passage describe besides fossil fuels?

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7. Based on the passage, why would the world be “slowly changing” from fossil fuels to other energy sources, rather than quickly changing?

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8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Scientists want to develop new ways of providing energy without harming the earth, \_\_\_\_\_ they are researching alternative energy sources.

- a. then
- b. but
- c. meanwhile
- d. so

9. Read the following sentence.

**To collect energy from the sun and save it for later, some people use solar panels.**

Answer the questions below based on the information provided in the sentence you just read. One of the questions has already been answered for you.

- 1. Who? Some people
- 2. What do some people do? \_\_\_\_\_
- 3. Why? \_\_\_\_\_

10. **Vocabulary Word:** alternative: other possibility; option.

Use the vocabulary word in a sentence: \_\_\_\_\_

\_\_\_\_\_

**Teacher Guide and Answers**

**Passage Reading Level:** Lexile 780

**Featured Text Structure:** Descriptive – the writer explains, defines or illustrates a concept or topic

**Passage Summary:** The passage discusses energy and its origins. The passage also points out that since energy from fossil fuels pollutes the air, scientists are working on alternative energy sources.

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  - b. the sun.**
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The word **thrive** means

- a. wilt
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5. This passage is mostly about

- a. **where energy comes from and how it is used.**
- b. how wind energy is different from fossil fuels.
- c. how plants use the sun's energy.
- d. why fossil fuels cause harm to the Earth.

6. What sources of energy does the passage describe besides fossil fuels?

**Suggested answer:** The passage describes wind power, water power, and solar energy.

7. Based on the passage, why would the world be “slowly changing” from fossil fuels to other energy sources, rather than quickly changing?

**Suggested answer:** The passage states that scientists are working to research and develop other energy sources, so the world would be slowly changing because there is still work to be done. The passage also states that the U.S. gets most energy from fossil fuels including gasoline for cars, so the reader can infer that people are continuing to use the sources they have in the past.

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Scientists want to develop new ways of providing energy without harming the earth, \_\_\_\_\_ they are researching alternative energy sources.

- a. then
- b. but
- c. meanwhile
- d. **so**

9. Read the following sentence.

**To collect energy from the sun and save it for later, some people use solar panels.**

Answer the questions below based on the information provided in the sentence you just read. One of the questions has already been answered for you.

1. Who? Some people

2. What do some people do? **use solar panels**
3. Why? **to collect energy from the sun and save it for later**

10. **Vocabulary Word:** alternative: other possibility; option.

Use the vocabulary word in a sentence: answers may vary.