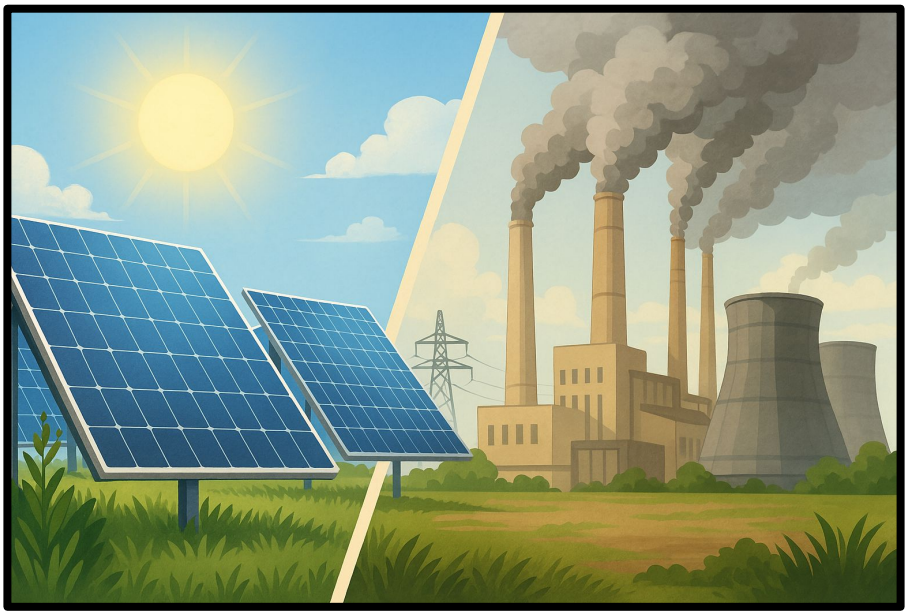
Read the short story and answer each question.



Solar Energy vs. Fossil Fuels

Electricity powers our lights, homes, and schools—but where that energy comes from can look very different. Two major energy sources are **solar energy** and **fossil fuels**. These sources are used around the world, and each has its own advantages and disadvantages.

Fossil fuels—like coal, oil, and natural gas—are made from the remains of ancient plants and animals. They are burned to create energy. Fossil fuels are easy to use, can produce large amounts of electricity, and have been used for over a hundred years. However, burning them releases **carbon dioxide**, a gas that causes pollution and contributes to **climate change**.

Solar energy comes from sunlight. Solar panels collect the Sun's rays and turn them into electricity. This source of energy is **renewable**, meaning it won't run out. Solar energy is also clean—it doesn't release pollution. But it doesn't work as well on cloudy days or in places with little sunlight, and solar panels can be expensive to install.

The author compares these two systems to help readers understand the **choices** people make about energy. Solar energy and fossil fuels both power the world—but they affect the environment and future in very different ways.

Name:

Solar Energy vs. Fossil Fuels

1. How is this passage structured to help readers understand the two energy sources?

A. The author uses compare-and-contrast structure to show how solar and fossil fuels are alike and different.

B. The author tells the story of someone who uses solar power.

C. The author uses a problem/solution structure to show why solar is better.

D. The author describes fossil fuels only and doesn't mention solar energy.

2. How are solar energy and fossil fuels different?

A. Solar energy is clean and renewable; fossil fuels cause pollution and will eventually run out.

B. Both are made from sunlight and plants.

C. Fossil fuels are used only during the summer, while solar energy is used in winter.

D. Solar panels and fossil fuels work best together.

3. Fill in the blank:

Unlike fossil fuels, solar energy is a _____ source that does not pollute the air.

4. How does the compare-and-contrast structure help readers better understand the pros and cons of solar and fossil fuel energy?

_____

_____

_____

5. What details in the text support the idea that solar energy is better for the environment?

_____

_____

_____

Parent and Teacher Guide

Guide Reading Level: U
Lexile Level: 925L-1075L
Grade Level: 5th Grade, Middle of the Year
Genre: Informational – Environmental Science / Energy

Introducing the Text

"This passage helps students explore the differences between two common sources of energy: solar power and fossil fuels. The compare-and-contrast structure makes it easier to weigh each option's impact on the environment and future. Students will identify structural elements and explain how they support understanding."

Vocabulary: renewable, fossil fuels, carbon dioxide, pollution, solar panel

Before Reading Discussion Questions

1. Where does the electricity in your home come from?
2. What do you know about solar energy or fossil fuels?
3. Why might people want to compare different sources of energy?

During Reading Discussion Questions

1. What are some pros and cons of fossil fuels mentioned in the text?
2. What makes solar energy a renewable resource?
3. How does the author show the differences between the two sources?

After Reading Discussion Questions

1. How does the compare-and-contrast structure help you better understand this topic?
2. What would be the best choice for a city that wants to reduce pollution? Why?
3. What could happen if we rely too much on one type of energy?

Activity Idea

Have students create a double-bubble chart comparing and contrasting solar energy and fossil fuels. Then write a short persuasive paragraph choosing one type of energy to support, using evidence from the passage.