

Energy Time Test

Sort energy sources by how quickly nature replaces them.

5.9.a "some sources of energy are considered renewable and others are not;"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each renewable energy source and circle each nonrenewable energy source to sort them by how nature replaces them.

Where Energy Comes From

- ① Energy for lights, buses, and factories comes from natural resources. Some resources are renewed by Earth systems over a short time. Sunlight reaches Earth each day, wind keeps moving, and flowing water can turn turbines. These sources can provide energy again and again when people use them carefully. They are called renewable energy sources because they can be replaced naturally.
- ② Coal, oil, and natural gas formed from ancient living things under heat and pressure. This process took millions of years. People remove these fuels from the ground and burn them for energy faster than nature can make more. Once a supply is used, it cannot be replaced during a human lifetime. These are nonrenewable energy sources.
- ③ A town may use several sources at once. Solar panels can make electricity on sunny days, while a power plant might burn natural gas when more electricity is needed. Renewable does not mean a source is available every minute. It means nature replaces the source on a much shorter time scale than coal, oil, or natural gas.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Name three renewable energy sources from the passage.

2 Why are coal, oil, and natural gas nonrenewable?

3 In the town example, which source is renewable, and which source is nonrenewable?

4 A student says, "A renewable source gives energy every minute." Does the passage support this idea? Explain.

3 YOUR TURN _____ Your own words

Complete the table with two energy sources not named in the passage. Choose one renewable source and one nonrenewable source, then explain why each belongs in that group.

ENERGY SOURCE	RENEWABLE OR NONRENEWABLE?	WHY?

PART 1 • READ AND MARK

Underline each renewable energy source and circle each nonrenewable energy source to sort them by how nature replaces them. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Name three renewable energy sources from the passage.	Sunlight, wind, and flowing water.
2	Why are coal, oil, and natural gas nonrenewable?	They take millions of years to form and cannot be replaced during a human lifetime.
3	In the town example, which source is renewable, and which source is nonrenewable?	Sunlight, used by solar panels, is renewable. Natural gas is nonrenewable.
4	A student says, "A renewable source gives energy every minute." Does the passage support this idea? Explain.	No. A renewable source may not be available every minute, but nature replaces it on a much shorter time scale than nonrenewable fuels.

PART 3 • YOUR TURN (SAMPLE ANSWER)

ENERGY SOURCE	RENEWABLE OR NONRENEWABLE?	WHY?
Tidal energy	Renewable	Ocean tides happen again and again.
Uranium	Nonrenewable	Earth has a limited supply, and it is not replaced during a human lifetime.

Accept accurate energy sources not named in the passage when the classification and explanation are correct. Renewable sources are naturally replenished on a short time scale, while nonrenewable sources have limited supplies or take far longer to form.