

Smart Resource Choices

How people manage supplies that can and cannot be replaced.

6.9.b “renewable and nonrenewable resources can be managed;”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Read the passage. Number 1 through 5 the five sentences that name a person or group and state one concrete action that manages a resource.

Resources at Work

- ① At Brookdale Middle School, drinking water comes from a river-fed reservoir. Fresh water is renewable because Earth’s water cycle replaces it, but a local supply can still run low during a dry season. The school manages fresh water by repairing a leaking pipe in the cafeteria. This action keeps treated water from being lost before students can use it. Teachers also explain that renewable does not mean unlimited. A resource must be used at a rate that allows nature or a system to replace it.
- ② Solar energy reaches the school’s roof each day and is renewable. Rooftop panels change sunlight into electricity without using fuel from the ground. The maintenance team manages solar equipment by washing dust from the panels twice a year. Clean panels can capture more sunlight. The school also uses natural gas, a nonrenewable fuel formed from ancient organisms over millions of years. Once burned, natural gas cannot be replaced on a human time scale. The custodian manages natural gas use by lowering the thermostat after school.
- ③ Wood is a renewable resource when trees are grown again as quickly as they are harvested. A nearby furniture company manages wood by buying lumber from forests where new seedlings are planted after cutting. Aluminum comes from bauxite, a nonrenewable mineral resource. Although bauxite does not regrow, aluminum can be recycled many times. The company manages its aluminum supply by collecting scrap pieces and sending them to a recycler. Recycling reduces the need to mine additional bauxite, which can disturb land and use energy.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Why must fresh water be managed even though it is renewable?

2 What action does the custodian take to manage natural gas, and why is natural gas nonrenewable?

3 How does the furniture company manage wood, and what makes this practice help keep wood renewable?

4 How does recycling aluminum help manage the nonrenewable resource bauxite?

3 YOUR TURN _____ Your own words

Plan a class picnic in four sentences. Name one renewable source resource and one nonrenewable source resource the picnic could use, then give one specific management action for each.

PART 1 • READ AND MARK

Read the passage. Number 1 through 5 the five sentences that name a person or group and state one concrete action that manages a resource. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Why must fresh water be managed even though it is renewable?	A local water supply can run low during a dry season, so water must be used at a rate that allows it to be replaced.
2	What action does the custodian take to manage natural gas, and why is natural gas nonrenewable?	The custodian lowers the thermostat after school. Natural gas formed over millions of years and cannot be replaced on a human time scale.
3	How does the furniture company manage wood, and what makes this practice help keep wood renewable?	The company buys lumber from forests where seedlings are planted after cutting. New trees are grown to replace harvested trees.
4	How does recycling aluminum help manage the nonrenewable resource bauxite?	Recycling aluminum reduces the need to mine additional bauxite.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Our picnic needs fresh water, a renewable resource. We will fill a cooler with only the amount guests are likely to drink. A propane stove would use propane, a nonrenewable fuel. We will serve foods that do not need heating, so we will not use the stove.

Accept equivalent explanations that connect careful use, replacement, recycling, or reduced use to managing a resource. For the open task, accept any accurate source resources and specific actions that match their renewable or nonrenewable status.