Rock or Water?

Sort parts of Earth's natural environment.

WG.3.1 "Define Earth's physical systems: atmosphere, lithosphere, biosphere, and hydrosphere. Categorize the elements of the natural environment as belonging to one of the four systems and explain how systems work together."

NAME _____ DATE _____

LITHOSPHERE

The lithosphere is Earth's solid rocky outer layer. Its rocks and minerals belong in this system.

A quartz crystal

HYDROSPHERE

The hydrosphere includes Earth's water as a liquid, ice, or water vapor.

Morning dew

1 SORT

8 items

For each numbered item, circle ROCK or WATER, then choose two items and explain how you knew where each belongs.

1. Sandstone cliff — ROCK WATER
2. River current — ROCK WATER
3. Polar ice sheet — ROCK WATER
4. Tectonic plate — ROCK WATER
5. Granite bedrock — ROCK WATER
6. Lake water — ROCK WATER
7. Copper ore vein — ROCK WATER
8. Limestone layer — ROCK WATER

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new example of the lithosphere and one new example of the hydrosphere.

ROCK _____

WATER _____

CHALLENGE

Explain one way the hydrosphere changes the lithosphere and one way the lithosphere affects the hydrosphere.

Rock or Water?

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Sandstone cliff	**ROCK**	Sandstone is rock in Earth's solid outer layer.
2	River current	**WATER**	The current is moving water.
3	Polar ice sheet	**WATER**	An ice sheet is frozen water.
4	Tectonic plate	**ROCK**	A tectonic plate is a section of the lithosphere.
5	Granite bedrock	**ROCK**	Granite bedrock is solid rock.
6	Lake water	**WATER**	Lake water is part of the hydrosphere.
7	Copper ore vein	**ROCK**	An ore vein contains minerals within rock.
8	Limestone layer	**ROCK**	Limestone is rock in Earth's solid outer layer.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **ROCK**: A marble outcrop
- **WATER**: Fog

Challenge: Ocean waves wear down a rocky shore, changing its shape. A mountain ridge redirects flowing water into a valley.

For Part 2, accept explanations that identify the material, such as ice sheet as frozen water and tectonic plate as solid rock. For Part 3, accept other accurate examples of either system.