

Where Water Waits

Use percentages and bar graphs to trace Earth's water.

5-ESS2-2 "Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. Assessment Boundary: Assessment is limited to oceans, lakes, rivers, glaciers..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each percentage in the passage and circle the reservoir it describes. Number the four fresh-water reservoir amounts from 1, largest, to 4, smallest, to gather evidence about where fresh water is stored.

Earth's Water Stores

- ① Earth looks blue from space because oceans cover much of its surface. Oceans hold salt water, not fresh water. Scientists estimate that about 97% of all Earth's water is ocean water. Only about 3% is fresh water. A percent means "out of 100," so a model of 100 water drops would show about 97 ocean drops and 3 fresh-water drops.
- ② Fresh water is not spread evenly among reservoirs. Of every 100 units of fresh water, about 69 units are frozen in polar ice caps and glaciers. About 30 units are ground water, stored in spaces and cracks below ground. Freshwater lakes hold about 0.3 unit, and rivers hold about 0.006 unit. Scientists use a magnified scale to make these tiny amounts visible on a graph.
- ③ Two graphs can make this pattern clear. A first graph can compare all Earth water: 97% ocean water and 3% fresh water. A second graph can compare fresh-water reservoirs: frozen water is the tallest bar, ground water is next, and lakes and rivers are very short bars. The graphs provide evidence that most water is salty or frozen, so little fresh water is easy to reach.

2 ANSWER WITH EVIDENCE Use the passage

- 1 In a model of 100 water drops, how many drops represent ocean water, and how many represent fresh water?

- 2 What percent of fresh water is frozen? Name the two frozen reservoirs in the passage.

- 3 On a bar graph of fresh-water reservoirs, which reservoir would have the second-tallest bar? Include its percentage.

- 4 Give two numerical facts from the passage that show why easily reached fresh water is limited.

3 YOUR TURN Your own words

Draw two labeled bar graphs from the passage, one for all Earth water and one for the four fresh-water reservoirs. Use a magnified inset or a second scale so the lake and river bars can be seen, then write exactly two sentences that use numbers from both graphs as evidence about Earth's water distribution.

PART 1 • READ AND MARK

Underline each percentage in the passage and circle the reservoir it describes. Number the four fresh-water reservoir amounts from 1, largest, to 4, smallest, to gather evidence about where fresh water is stored. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	In a model of 100 water drops, how many drops represent ocean water, and how many represent fresh water?	About 97 drops represent ocean water, and about 3 drops represent fresh water.
2	What percent of fresh water is frozen? Name the two frozen reservoirs in the passage.	About 69% is frozen in polar ice caps and glaciers.
3	On a bar graph of fresh-water reservoirs, which reservoir would have the second-tallest bar? Include its percentage.	Ground water, about 30% of fresh water.
4	Give two numerical facts from the passage that show why easily reached fresh water is limited.	About 69% of fresh water is frozen, while freshwater lakes hold about 0.3% and rivers hold about 0.006%.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Graph 1 bars: Ocean water, 97%; Fresh water, 3%. Graph 2 bars: Polar ice caps and glaciers, 69%; Ground water, 30%; Freshwater lakes, 0.3%; Rivers, 0.006%. Most Earth water is ocean salt water because the first graph shows 97% in oceans. Of the fresh water, most is frozen in polar ice caps and glaciers, while lakes and rivers hold far less than 1%.

Accept reasonable bar graphs with clear titles, labels, percentages, and a scale or inset that makes the smallest values visible. Accept rounded language such as about 97%, 3%, 69%, and 30%, and treat polar ice caps and glaciers as the combined frozen-water category used in the passage.