Where is Earth's water?

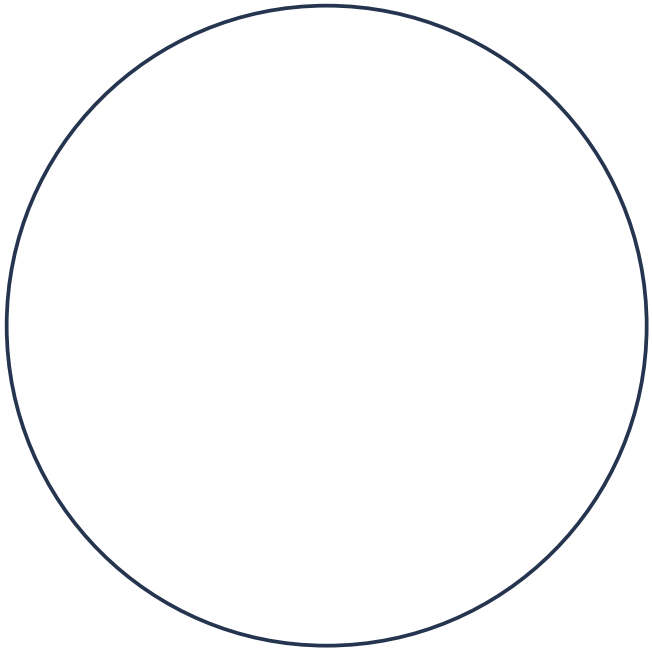
DAY 1 / Slides 2-4

Name: _____ Date: _____

Our focus: How does water move through Earth's systems, and why is usable freshwater limited?

A whole planet in one pie chart

As you learn, divide this blank circle into salt water and freshwater. Color and label the shares. Your drawing can be approximate.



Salt water: _____ %

Freshwater: _____ %

This chart shows ALL water on Earth. It does not show the percent of Earth's surface covered by water.

Zoom in on freshwater

Frozen in ice caps and glaciers: _____ %

Fresh groundwater: _____ %

Surface water and other freshwater: _____ %

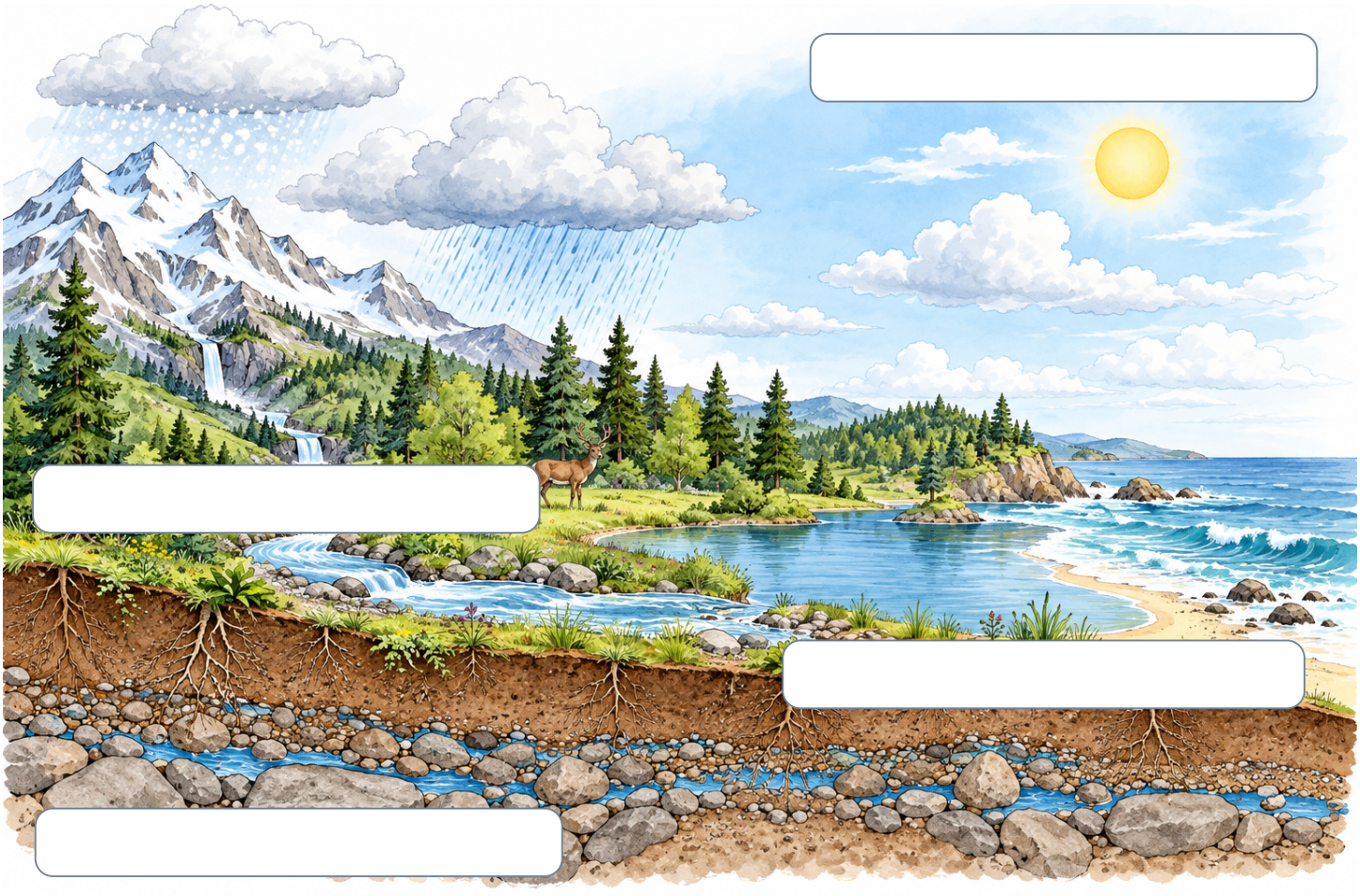
Why is freshwater in a river or lake only a small part of Earth's water?

One landscape, four spheres

Name: _____ Date: _____

Write each sphere name on the picture. Add a line from the name to one example. Use all four words.

atmosphere **hydrosphere** **geosphere** **biosphere**



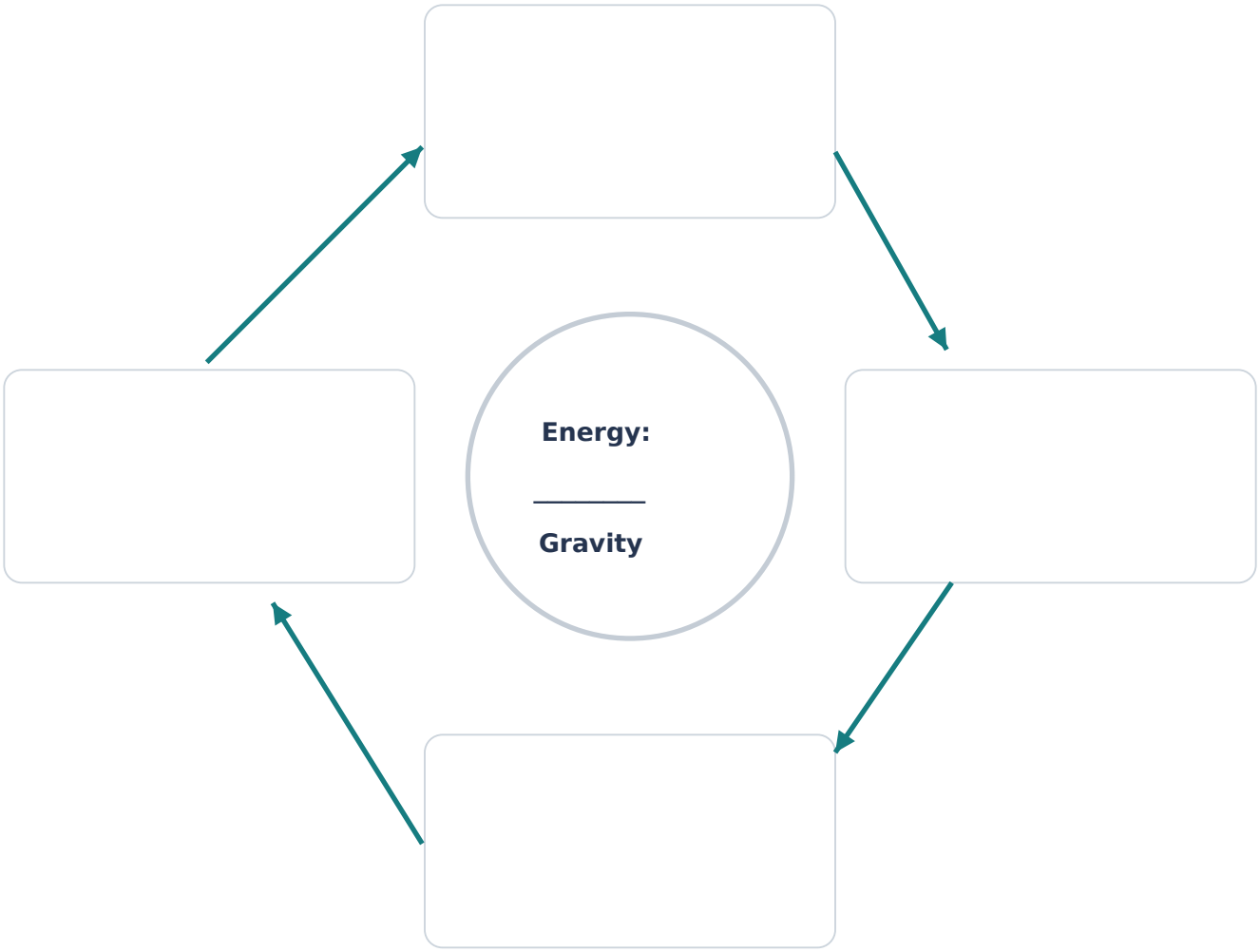
Water connects the spheres

Choose two spheres. Describe how water moves between them.

Build a water-cycle model

Name: _____ Date: _____

Fill the four spaces with a process or storage word. Add a quick sketch in each space. The arrows show one possible route.



Word bank: evaporation, condensation, precipitation, collection

Add a branch below: show one route through a plant or underground.

Landscape: original AI-generated illustration.

Sources: USGS Water Science School and UCAR Center for Science Education.
usgs.gov/water-science-school/science/where-earths-water
usgs.gov/water-science-school/water-cycle
scied.ucar.edu/learning-zone/how-weather-works/water-cycle

Questions worth explaining

DAY 1 + DAY 2 / Use words and examples from the lesson

Name: _____ Date: _____

1. What provides energy for evaporation? What pulls rain and runoff downward?

2. How is invisible water vapor different from a visible cloud?

3. Name two forms of precipitation. What makes them fall?

4. How are runoff and infiltration different?

5. Where is groundwater stored?

6. Must every drop visit every place in the same order? Explain.

7. If water keeps cycling, why should we protect our freshwater supplies?

The cold-cup mystery

DAY 2 / Slides 10-11

Name: _____ Date: _____

Where does water on the outside of a cold cup come from?

Use two dry, clear cups with lids: A has ice water; B has room-temperature water. Use equal water amounts, wipe the outsides dry, and set them on dry paper towels. Do not open, tip, or touch them. Observe for 5 minutes.

CUP A / ICE WATER

Sketch the OUTSIDE after 5 minutes.

CUP B / ROOM WATER

Sketch the OUTSIDE after 5 minutes.

What changed on Cup A?

What changed on Cup B?

Explain the droplets using the word condensation. Use your observations. If you see no droplets, record that honestly.

Water Cycle Four Corners

Name: _____ Date: _____

Draw one example of each process. Use an example from the game or one of your own. Finish each sentence.

EVAPORATION

Draw your example here.

Here, water is...

CONDENSATION

Draw your example here.

Here, water is...

PRECIPITATION

Draw your example here.

Here, water is...

COLLECTION

Draw your example here.

Here, water is...