

The Water Cycle

Water Follows a Cycle Cluster (Lessons 3-8)

Directions:

1. Make a drawing of the water cycle.

2. Label the following parts:

- Precipitation
- Percolation
- Evaporation
- Condensation

TEACHER NOTE:

Use this assessment after teaching Lesson 8.

EVALUATION GUIDELINES:

When evaluating student drawings, consider whether they include the following elements:

- A type of precipitation (rain, sleet, hail, or snow). Precipitation should be shown to originate in the sky.
- Precipitation landing on the surface of the earth. At that point, the drawing should indicate that some of it may percolate into the earth as groundwater and end up in an aquifer.
- Water evaporating off the surface of the earth (from surface water, land, or vegetation).
- Condensation occurring in the air or sky. This might be shown as clouds or by the word “condensation”.

3. Does the amount of water on Earth stay the same? Explain your answer.

- Students should explain that the amount of water on Earth stays the same because it is constantly circulating through the water cycle, and no new water is added.

A Drop of Rain

Water Follows a Cycle Cluster (Lessons 3-8)

Imagine you are a drop of rain. Write a story about the journey you take as you fall to the surface of Earth and travel through the water cycle.

Include the following in your story:

- The words precipitation, condensation, and evaporation
- A description of why your journey will never end
- A picture to illustrate your journey

TEACHER NOTE:

Use this assessment after teaching Lesson 8.

You might write the following words on the board and encourage students to include some (or all) of them in their stories as well: percolation, flow, gravity, transpiration, groundwater, surface water, aquifer, water vapor, and cloud.

EVALUATION GUIDELINES:

When evaluating student stories, consider the following:

- Do students describe how the raindrop falls to the earth as a form of precipitation?
- Do students describe how the raindrop eventually evaporates off the surface of the earth and condenses in the air?
- Do students' descriptions reflect an understanding that their journey will never come to an end because water is continually cycled through the water cycle?
- Do students include a picture with their story?

News Release

Water Follows a Cycle Cluster (Lessons 3-8)

Consider the following fictional news release, then answer the question below.

Scientists discover another “watery planet.” Details below:

- The planet is covered in fresh water.
- The water around the equator is frozen.
- The water at the north and south poles is liquid.
- The planet is completely covered with clouds.
- It is hard to tell if there is groundwater.

How does the description of the water on this new planet compare to the water on Earth?

TEACHER NOTE:

Use this assessment after teaching Lesson 8.

EVALUATION GUIDELINES:

When evaluating student answers, consider whether they include the following elements in their written explanations:

- Instead of fresh water, salt water covers most of the surface of Earth.
- Earth has frozen water but it is typically found at the poles and as glaciers. Water around the equator of Earth is liquid.
- Earth also has many clouds, but not at all times. Students may mention that clouds indicate that there is water in the air on Earth and on the new “watery planet.”
- Students might also explain that groundwater is not visible from a picture or a globe, but we know that groundwater exists on Earth.

Water Follows a Cycle Cluster

Quick Check Items

TEACHER NOTE: The following questions relate to the Water Follows a Cycle cluster. Use them after teaching the entire cluster, or select the applicable questions immediately following each lesson. You can also compile the Quick Check items into an end-of-unit assessment.

1. (Lesson 4) Most of Earth's surface is covered by:

- a. land
- b. fresh water
- c. *salt water*
- d. ice

2. (Lesson 4) Name three different bodies of water that you are familiar with.

Students could list general categories such as lakes, rivers, or oceans or be required by you to list specific bodies of water in their state or county.

3. (Lesson 5) What statement **best** describes how water gets into an aquifer?

- a. Water is pumped by humans into the ground.
- b. *Water percolates into the ground.*
- c. Water forms underground and stays underground.

4. (Lesson 5) What item from a kitchen could act as a model for an aquifer?

- a. bowl
- b. pot
- c. *sponge*
- d. strainer

5. (Lesson 5) Choose the word that **best** completes this statement.

_____ of the **available** fresh water on Earth is stored as groundwater in aquifers.

- a. all
- b. *most*
- c. some
- d. none

6. (Lesson 6) True or False? If false, rewrite the statement to make it true.

Of all the fresh water on Earth, most is trapped as ice in glaciers and polar ice caps. _____ *true*

7. (Lesson 7) Fresh water exists in the air as:

- a. condensation
- b. evaporation
- c. *water vapor*