

Lesson 2: Water Goes Round & Round

In this lesson, students will be introduced to the various stages of the water cycle.

Focus

Water Cycle

Focus Questions

- What happens to water during the water cycle?
- Why do the different stages of the water cycle occur?

Materials Needed

Our Water PowerPoint	Lesson 2 Handouts
Glass of clean water	Plastic Wrap
Jar	Tape
Gravel	Scissors
Sand	Glue
Soil	Cotton Balls
Small, Yellow paper plate	Blue Yarn
Construction Paper	Permanent Marker
Green Crepe Paper	Confetti/ Stickers/ Glitter

Advanced Preparation:

Prepare a demonstration of the water cycle using a large clear jar or other clear container. Fill the bottom of the jar with a layer of gravel. On top of the gravel, you may put a layer of soil and/or sand. The layers of gravel, sand, and soil should be more than 2-3 inches thick. Use your judgement based on the size of the container. It should be just enough for the loss of water through evaporation to be noticeable. If you wish to, add plants to the jar as well. Add some water to just barely cover the soil layers. Then, cover the top of the jar with plastic wrap. Secure the plastic wrap to the jar using tape and place the jar in a nearby windowsill that receives regular sunlight. As an alternative, you can use a lamp as a heat source if a window is not readily available. You will use the jar later in the lesson.



Image: Freepik.com

Grade Level: 1

Learning Objectives

- Students will be able to explain the basic processes of the water cycle.

Key Words

Water cycle, Condensation, Precipitation, Evaporation, Collection

Prior Knowledge Required

- Students should know and be able to explain that water is a valuable natural resource and that natural resources come from the earth.

South Carolina Science Standards and Performance Indicators Addressed

2.S.1A.6



Engage

Begin the lesson by posting pictures of steam, clouds, rain, and the ocean (pictures are included in the PPT provided). Ask the students, "What are these pictures of? What do the pictures have in common?" Students should understand that the pictures all have to do with water and are part of a process known as the Water Cycle.

Next, hold up a glass of water and ask, "How old do you think the water is that is in the glass?" Lead a discussion about the age of water. Be sure students understand that all water is extremely old. Due to the Water Cycle on earth, the water on earth now is the same water that has been here for billions of years. It just keeps circulating through the water cycle all the time and all over the world.

Explore

Then, explain to the students that they are going to learn a song about the water cycle. Refer to the song slide included in the *Our Water Power Point*. Go through the song and dance motions several times with the students.

Explain

After the song and dance, review the important parts of the Water Cycle with the pictures and/or graphic included in the Power Point. Explain the following concepts:

- The *water cycle* is the continuous movement of water on earth from the ground to collected waters to air and back to the ground.
- *Evaporation*: The stage of the water cycle during which liquid water on the surface of the earth is changed into vapor (gas) as a result of heat energy.
- *Condensation*: The stage of the water cycle during which vapors rise and cluster together as clouds because the water is tiny and weighs very little. Water vapor is changed back into liquid. As the water droplets cool down drastically, the water droplets freeze and become heavy.
- *Precipitation*: The stage of the water cycle during which water droplets that have frozen and become heavy, fall from the sky and melt as they fall down. The water may fall in the forms of rain, snow, sleet, or hail depending on the temperature of the air going down.

Knowledge Check:

Have students tell you which picture matches the words that you call out.

Say the following words aloud during the check: sun, evaporation, condensation, cloud, rain, precipitation, collection.

Post the terms (or even the graphic) somewhere in the room where they can easily be seen throughout the rest of the lesson.



- *Collection*: The stage of the water cycle during which water either soaks into the ground or flows with the force of gravity into lakes, streams, ponds, rivers, and oceans.

You can use the Our Water PowerPoint as a visual guide during your discussion. Show pictures of each stage of the Water Cycle as you talk about it.

At this point, check on your jar to see if any water has evaporated. If you are not able to see results, wait a little longer (possibly until the next day). Eventually, students should be able to see drops of water form on the plastic wrap. Explain to the students that clouds are condensed drops of water. Basically, they will be able to see a mini version of the water cycle in action.

After the students have been able to observe the water cycle within the jar, remove the plastic wrap from the top of the jar. Have students predict what will happen to the water now. Mark the water level every day until the water is gone. Discuss with the students what is happening to the water. Ask students if they think the amount of water that evaporates in the summer is the same amount of water that evaporates in the winter. Have students discuss their reasoning.

Elaborate

Next, students will create a picture/diagram of the water cycle using household items. Glue/attach the following items to a piece of construction paper.

- Cotton Balls – Clouds
- Small, Yellow Paper Plate – Sun
- Blue Yarn – Water
- Green Crepe/Construction Paper – Land
- Confetti/Stickers/Glitter and Glue – Rain Drops

Have students draw arrows showing the order of the cycle stages. Lastly, have them glue the terms in the appropriate places on their diagrams.

Additionally, you can have students write an explanation of the water cycle, using the terms, on the back of the diagram.

Evaluate

Ask students to illustrate and describe, verbally or in writing, the stages of the water cycle that they have learned.

Resources

“Support Guide 3.0 for Second Grade.” South Carolina Department of Education Office of Standards and Learning, June 2018.

For More Information and Feedback:

We value your feedback on this lesson, including how you use it in your formal/ informal education settings. Please send your comments to:
caitlin.graham@ncsd.sc.gov

Acknowledgements:

Created by Caitlin Graham, FOG Program Manager, North Charleston Sewer District

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<https://ncsd.sc.gov/learning-about-fog/>

Evaporation



Condensation



Precipitation



Collection

