

Sponge Rain

Companion Text: If You See the Moon, by Zia Wells

Subject Area & Grade Level: Science, 2nd Grade

Materials: Sponges, spoon, buckets for water

Objectives

After this lesson, students will be able to:

- Demonstrate an understanding of the path of water in the water cycle
- Give examples of water in each state of matter—solid, liquid, and gas
- Practice scientific inquiry by forming and testing a hypothesis

Staging Activity

Read the story once through without stopping. Then, ask students if they can remember from the book how Cirra and Nimbu caused it to rain. Ask them what causes rain, and write their suggestions on the board.

Core Activity

Give each student (or group of students) a sponge, a spoon, and a bucket of water. Have students take out a sheet of paper and predict what will happen when they pick up the sponge if they first take a spoonful of water and empty it into the sponge. What will happen if they pour two spoonfuls of water into the sponge and then pick it up? Have students predict how many spoonfuls of water will “fit” in the sponge before it drips water when they pick it up. Then, have them try this simple experiment, recording each spoonful of water with a tally mark on their piece of paper. When everyone has finished, ask students to share their results. Then, ask students to talk with a partner about how the results of their experiment could be used to explain what causes rain. Finally, have students discuss and respectfully evaluate the list of ideas on the board with their partners.

Extension

Explain that water can be a solid, like ice, a liquid, like rain, or a gas, like steam. Rain is caused when water vapor in the air condenses or sticks together, forming clouds (a gas). When clouds get heavy enough, the water falls in the form of droplets-- raindrops (a liquid), or snowflakes (solids). Have students saturate their sponges and hold them up to let the water drip out of them. Ask if the roomful of dripping sponges sounds like rain. Explain that most of the rainwater flows eventually to the ocean, where some of it is heated by the sun, and becomes water vapor again. Define this as the water cycle, and have students draw a picture of what you’ve discussed. Their pictures should include arrows indicating the movement of water.

