

WATER HERE AND THERE

K-2

OBJECTIVES

At the end of this lesson, the students shall be able to do the following:

1. Give an oral or written definition of precipitation;
2. Tell at least two things that can happen to precipitation after it falls to Earth; and
3. Give an oral or written definition of the new terms: aquifer and water table.

SUBJECTS:

Language Arts, Art, Creative Movement

TIME:

1 hour (does not include prep time)

MATERIALS:

large paper grocery sack for each child
blue crepe paper
brown crepe paper

BACKGROUND INFORMATION

Precipitation is defined as water that falls to Earth in the form of rain, snow, or hail. Precipitation falls on all types of surfaces: water, mountains, grass, concrete and roof tops. Some of the precipitation evaporates, some runs down into bodies of water, and some seeps down into the ground and becomes part of the water table.

Terms

aquifer: porous, water-bearing layer of sand, gravel, and rock below the Earth's surface; reservoir for groundwater.

precipitation: water droplets or ice particles condensed from atmospheric water vapor and sufficiently massive to fall to the Earth's surface, such as rain or snow.

water table: upper surface of the zone of saturation of groundwater.

ADVANCE PREPARATION

- A. Cut grocery sacks (one per student). Cut a hole in the bottom of the sack large enough for the student's head to fit through. Cut a hole in each (short) side of the sack for the arms of the student to fit through. (Sack should resemble a t-shirt.)

- B. Use blue crepe paper wrapped around a circle of chairs to form a body of water.
- C. Use brown crepe paper wrapped around a circle of chairs to form a representation of an area of ground.

PROCEDURE

I. Setting the stage

Share background information.

II. Activities

- A. Give each student one of the prepared grocery sacks. Have each one draw a large raindrop on the front of the sack.
 - 1. Have 1/3 of the class also draw a snowflake on the backs of their sacks.
 - 2. Have 1/3 of the class also draw a hailstone on the backs of their sacks.
- B. Divide the students into two groups. Each group should have some students dressed like rain, snow, and hail. Have one group stand behind the blue roped-off area and the other group stand behind the brown roped-off area. The snowflakes and hailstones should stand backwards so the pictures show. Read the narration prompting students' movements as they dramatize the lesson.
- C. Narration:

"Water falls to the Earth in three forms: rain, snow, and hail. This is called precipitation. Sometimes precipitation falls into a body of water." (Have one group jump into the blue "body of water.")

"Snow and hail melt and become water. Sometimes precipitation falls on the ground." If enough precipitation falls to the ground, puddles may form. (Have part of the second group jump into the brown "ground" area.)

"Snow and hail melt and become water. Some of the water runs off down a slope." (Have one student slide out from under the roped area.)

"Some of the water seeps down through the ground (the students slowly squat), around rocks, and through soil and other rocks until it reaches a layer that is already filled with water. This layer is called an aquifer and the water in it is called groundwater. Gradually, the water in the puddles seeps down through the ground or it evaporates." (Have some of the students stand up slowly on the table.)

"Some of the water from the aquifer is pulled up through a well by pumps and is used by people. We all depend on groundwater and it should be kept clean."

III. Follow-Up

- A. Have the students draw pictures showing precipitation and water seeping down to an aquifer.

IV. Extension

- A. Tell your students, “The depth of the aquifer varies from place to place.” Ask, “Why do you think that is?” Discuss and extend the concept of precipitation.

RESOURCE

Groundwater Concern, Inc., 1794 Columbia Road, NW, Washington, D.C., 20009, 1984.