Optional Extension Activity

A WET WATERSHED

Subject

Science

Objectives

The student will (1) be able to predict where water will flow and collect in a watershed, and (2) reinforce the components of a watershed in a tangible way.

Materials

1 Spray bottle per class
Water-soluble markers
1 plastic garbage bag or plastic sheet per student
1 piece of blank white paper per student

Size/Setting/Duration

Whole class/classroom/~45 min.

Background

See background information for *What is a Watershed* activity.

Activity

1. Make sure that the *What is a Watershed* worksheet from the *Student Journal* is complete before starting this activity. It gives the base knowledge for this activity, and introduces the parts of a watershed that this activity will reinforce.

2. Review what a watershed is, and tell the class that they will be making their own watershed. Give each student a garbage bag to put on their desk to later collect the "rain" water. Ask the students to loosely crumple their pieces of paper into a ball, and then slightly uncrumple them so that they can see what looks like mountain ranges, ridges, rivers and basins. Explain to them that the high points on their maps are mountains, and that you can see where mountain ridges have formed. Discuss what the depressions in the paper might be (lakes and rivers).

3. Ask the students where they think the water might flow and collect in their watershed. Have the students trace those routes on their watershed model with a marker.

4. Tell the class that it is now going to rain on their watershed. Go around to each student and spray water on his or her watershed model. Spray them long enough so that the water starts to flow to the lower elevations. As a class, discuss where the water flowed and ended up. Encourage the students to use vocabulary from the *What is a Watershed* activity.

6. Finally, discuss how humans might impact the watershed. Students can draw in some human impacts on their watershed model (logging, livestock, houses, roads, etc.), and decide what affects these impacts may have on the water and where it flows. You can discuss how water will flow more quickly in an area with no plants or trees (because there is less to stop the water and no roots to soak some of it up). The water will also pick up more sedimentation in these areas, and you can decide as a class where that sedimentation will end up by looking at the watershed models.

Component	Benchmark	Assessment
1.1 Science Use properties to identify, describe, and categorize substances, materials, and objects	Describe the relative position and motion of water	Students will estimate where water will flow by tracing the potential waterways
1.3 Science Understand how interactions within and among systems cause changes in matter and energy	Know humans and other living things depend on the natural environment, and can cause changes in their environment	Students will discuss how the man-made structures in their watershed impact the watershed
2.1 Science Develop abilities necessary for scientific inquiry	Plan and implement scientific investigations, model objects and processes by representing them with concrete objects	Students will trace the potential waterways, then test their estimation by spraying model with water, students will make a model of a watershed out of paper