

# SHAPE A WATERSHED

**Summary:** Students will be introduced to the basic structure and function of a watershed by creating their own.

**Time Frame:** 30 minutes.

**Materials:** Paper, tape, water base markers, spray bottle.

**Vocabulary:** *Watershed* - All land from which precipitation collects and drains to a common point, also known as a drainage basin. *Divide* or *ridge line* - points of higher ground that separate two adjacent streams or watersheds.

**Background:** Describe a watershed to your students. Remind them that just as a tool shed has walls, a floor and a roof, so too does a watershed. Compare parts of a tool shed to those of a watershed. Its walls are the sides of valleys and mountains, its floor bottomlands with streams, rivers and lakes, and its roof a ceiling of clouds.

**Procedure:** Each student or pair of students will create their own watershed. Teachers can briefly model the activity by creating their own watershed, demonstrating the procedure.

Take one sheet of paper and crumple it up in a loose wad. Carefully uncrumple it, leaving it about half bunched up. Tape the edges of it onto a base sheet of paper, creating a miniature landscape of mountains and valleys.

Using non-permanent, water soluble blue markers, gently shade the tops of the ridges and divides. Have students guess where streams, rivers and lakes will form by tracing them in with a dark, fine-point marker.

Have students create rain by misting their paper watersheds with the spray bottle. Have them observe where the water flows as the marker colors run "downslope."

Ask students to identify the major divides on their watershed models. Did they correctly guess where streams, rivers and lakes would be? Where might they find wetlands on their models?

## **Extensions:**

Have students look at a map of the Puget Sound watershed. Have them name the mountain ranges that are the boundaries of the watershed and where they live in the watershed. Within the Puget Sound watershed are many other smaller watersheds centered around rivers and streams. Have the students discover in which watershed they live. Have students label rivers and places on the unlabeled Puget Sound watershed.

Create a scale model of the local watershed using clay or cardboard using topographic maps of the area.

This activity was adapted from: *The Living River, An Educators Guide to the Nisqually River Basin* by Chris Maun.