

What's a Watershed?

Simple STEM Activity

Purpose:	The purpose of this activity is to learn the importance of our state's watersheds by modeling one using paper, markers, and water.
Standard(s):	<p>S3L2. Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment.</p> <ol style="list-style-type: none"> Ask questions to collect information and create records of sources and effects of pollution on the plants and animals. Explore, research, and communicate solutions, such as conservation of resources and recycling of materials, to protect plants and animals.
Materials:	<ul style="list-style-type: none"> White paper (card stock works best), colored markers, misting bottle or cup, water
Procedures:	<ol style="list-style-type: none"> Crumble a half-sheet of paper into a tight ball. Once it is as tight as you want, unfold and 'stretch' paper out. It should not touch the surface it is placed on completely. It will resemble mountains and hills like a topographic map. Provide students with a few colored markers and have them 'highlight' the ridges. Instruct them to circle places where they think water would pool or collect with a different color. Using a misting bottle, spray the 'mountain range' until water begins to move across the paper. Alternatively, gently power a small stream of water down on the 'mountain range'.
Science Behind It:	A watershed is an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. The word watershed is sometimes used interchangeably with drainage basin or catchment. The watershed consists of surface water--lakes, streams, reservoirs, and wetlands--and all the underlying ground water. Larger watersheds contain many smaller watersheds. Watersheds are important because the streamflow and the water quality of a river are affected by things, human-induced or not, happening in the land area "above" the river-outflow point.
Questions to Ask:	<ul style="list-style-type: none"> Did you notice how the colored marker on the tops of your mountain ridges was washed into the rivers and lakes? What do you think this shows if the colored marker represented pollution?

	<ul style="list-style-type: none">• How could we prevent pollution from building up in our watersheds?
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