

Create Your Own Watershed

A three-dimensional model of a watershed is one of the best ways to demonstrate the watershed concept to your students. With a three-dimensional model, you can demonstrate how water runs from peaks and ridges, to low points such as valleys, wetlands and other depressions. In addition, with the use of a few household kitchen items, such as cool-aid and cocoa you can demonstrate how pesticides and sediment are washed off the earth's surface during rain events and into our lakes, rivers and oceans.

Materials:

- spray bottle with blue-colored water
- a large aluminum roasting pan
- numerous rocks of various sizes
- several pieces of white scrap paper or newspaper
- one kitchen-size white trash bag
- Cocoa and cool-aid mix

Procedure:

- Wrap the rocks in newspaper and place on the bottom of the roasting pan to create an uneven surface (the topography of your watershed).
- Cover the rocks with the white trash bag, being careful to tuck the edges under the rocks (use a few rocks on top to hold the trash bag in place).
- Ask the students where they think water that falls on this watershed will flow
- Spray the model with the blue-colored water until water begins to run-off the higher points and pool in the lower areas (depressions).
- To show how pollutants are washed off the land surface, sprinkle cocoa and cool-aid in key locations (where erosion or pesticide use might occur) - then spray the model again until the pollutants run-off into the depressions.

This activity can be done as a class, or in smaller groups. If small groups create their own watersheds, have the groups compare their results at the end.

To make a permanent model, use the above supplies, but substitute paper-mache material for the white trash bag. Once the paper-mache has dried thoroughly, paint the model with white water-proof paint. The model can now be re-used with numerous classes.