

Activity 1.2: DIY Watershed Model

In this activity, you will be making a watershed model! Ever heard of a watershed? You may not realize it, but you are in one right now! A watershed is not only an area that we all live in, but it is a place that provides a habitat for wildlife on land and in water as well. It is a large area of land that naturally absorbs water from rain and snow before draining into a nearby waterbody like a river, stream or lake. The boundaries of a watershed are the mountains, hills, or other high points where land slopes toward the water.

You will need:

- 2 sheets of A4 paper. Use paper from the recycling bin if you can!
- A spray bottle filled with water.
- Watercolour paint so the colours will run when they are wet you'll need blue, brown, green, and red. Or substitute another colour if needed.
- A tray or towels to catch the water.

Instructions:

- 1. Take one sheet of paper and crumple it up in your hands.
- 2. Open the paper, but do not flatten it. You want it to have some "relief" some high and low places. The high places are hills, the low spots are valleys, and the wrinkles are streams and rivers.
- 3. With the blue paint, paint on the paper where you think the streams and rivers would be.
- 4. Check to see if you are right. Place the paper on a tray or towel. With the spray bottle, make it rain in the watershed.



Instructions (cont.):

- 5. Squirt a fine mist over the watershed model, enough to make water flow down the "hills". Did you draw the streams and rivers in the right places? Do you have a lake? This is how watersheds function, the water is shed by the land into streams, rivers, and lakes.
- 6. Now do the same thing with the second piece of paper, crumple it, then open it up but not too much.
- 7. Draw the streams and rivers with the blue paint. Maybe include a lake or two.
- 8. Next, use the brown paint and draw along the tops of the hills. With a green marker, you can draw in trees, grass, crops or pastureland. Use the red paint to draw towns, houses or businesses.
- 9. Place the "watershed" on a tray or towels and squirt it with water. You'll see streams again. But you'll now see a lot of other stuff (colours) running into the streams along with the water.*

Be sure to clean up when you are finished with your watershed models

*If this were a real watershed, the brown could be dirt from bare soil, the green could be grass clippings or leaves, and the red could be oil from leaky cars or fertilizer someone spilled on a driveway. That's what happens when things on the ground are picked up by stormwater runoff, they end up in streams or rivers – just like Junction Creek – and move down the watershed.