



Waterways Activities



River Research Activity

Adapted from NC Division of Water Resources "My River Model" activity

1. Look up your address on Acme Mapper, Google Maps, or another mapping service.
2. Identify a river or stream near you.
 - a. Have you ever visited or seen this river in your community?
 - b. Does it flow into another river?
 - c. Try to trace it all the way to the ocean.
3. On a piece of paper, draw a diagram of part or all of the river you researched. If you have colored pencils, crayons, or markers, use them to represent different areas along the river. For example:
 - a. With a green crayon, color trees and other plants along the river
 - b. With a brown crayon, color houses along your river
 - c. With an orange crayon, color any farms that may be on your river
 - d. With a black crayon, draw major roads near your river
4. Take a picture of your whole diagram!



River Model Activity

Adapted from NC Division of Water Resources "My River Model" activity



Haw River, NC

1. Go outside and find a spot with soil you can dig in. This will be where you build your river model.
 - a. If you don't have an outdoor area, you can fill a tray/bucket/large container with soil and create a smaller version of your model
2. Build up your soil so there is a smooth, slightly sloping area (like a very slight ramp). If you're building your model in a container you can lift up one end by placing some books underneath.
 - a. With a spoon or stick, dig a trench for your river.
 - b. Use your stick or the back end of your spoon to trace roads and outline buildings, farms, or other landmarks along your river.
3. Slowly pour water from a cup into the top of your river. These are the "headwaters".
4. Continue to pour water until you notice significant changes.
5. As you pour more water, what do you observe? Take a picture of your model!
 - a. Is the soil moving?
 - b. Where does the water settle and stop moving?
 - c. How does this model something in the real world?

Create a Dam Activity

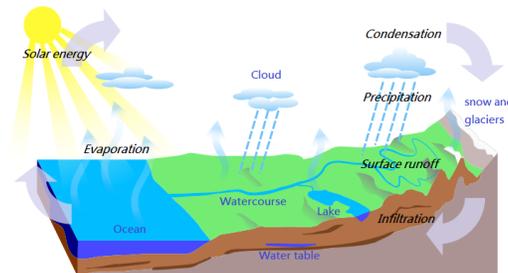


1. Build a river model. See “River Model” activity for instructions.
2. Experiment with different objects that block the flow of the river. Pour water down your river to test each object. You may have to reshape the soil in your river after each object you try.
3. Write down your observations with each different object. Try at least 3 different items.
 - a. How does the flow change?
 - b. Which objects worked well? Which didn’t? Why?
 - c. Did the shape of the river change? How did this impact the surrounding area?
 - d. How could a dam impact the habitat for animals both in and around the river?

Rain and Runoff Activity

Adapted from Urban Adventure Squad “Impervious Surfaces” activity

1. Get two bowls or other containers.
 - a. Fill one bowl halfway with dirt and the other with small rocks, plastic bottle caps, or anything else that would be like gravel.
 - b. These represent pervious and impervious surfaces. Pervious surfaces allow water to get through. Impervious surfaces are surfaces where water can’t get through and runs off the top.
2. Measure a half a cup of water and pour it slowly into each bowl (one half cup per bowl). Wait 3 minutes for the water to drain through each bowl.
3. Using a spatula or large spoon to hold the materials in the bowl, pour the water from the bowl back into your measuring cup.
 - a. How much water was remaining from each bowl? Measure the amount from each.
 - b. Which bowl had more water remaining after the 3 minutes?
 - c. What happened to the rest of the water?
4. How does this model what happens on different ground surfaces when it rains?
5. Take a walk around your neighborhood. Is there more pavement or dirt surfaces? How would a storm affect your community? Where would the water go?



Original photo [here](#)