4) Cover the entire area and all of the objects with a plastic sheet. Have the students use their hands to mold the plastic loosely around the covered objects. This is a model of a landscape with hills, valleys, and connections between them.

5) Have the students predict what will happen if it 'rains' on their model. Where will the water go? Will it go faster in some places? Will some places form pools? How do you know?

6) Use the spray bottle to 'rain' on the top of your highest 'mountain'. Continue raining until you can see where streams, rivers and lakes form.

7) Have students choose a small pool on their model to be a Hydrology site. Mark the site with a marker, stone or other object.

8) Ask the students to make it rain by using the spray bottle. Ask the students, "Where does the water come from that flows to your Hydrology site? Where does water flow away from your site? What things on the landscape determine what will be part of your basin? What determines the watershed? Explain to the students that the places where water hits and flows into their site are in the catchment basin for their site, the watershed is the basin boundary.

9) Ask students: "Where would be a good place on their model to have their school? Where would you like your house to be? Have the students mark these places on the model.

10) Have students explore the consequences of changes in their catchment basin. Here are some things you can do:

    a. What happens if you dam the stream that flows to your water site? (Use a sponge to create a dam).

    b. What happens if you plant a forest above your site? (Use a large flat sponge for the forest – it will soak up water for a time just like soil and vegetation) What happens if you remove the forest?

    c. What happens if someone builds an industry that causes pollution? (Use a small piece of sponge soaked in food color where your industry will be and watch the 'pollution plume' as it rains.)

    d. What happens if someone decides to use water from your stream for irrigation or urban use? (Make 'canals' that take the water away from your stream to other places)