



BUILD AN AQUIFER MODEL

Supplies:

Clear Plastic Container, Light-colored Pebbles, Soil, Moss (or grass clippings), Paper Cup (punch holes in bottom), Pencil (sharpened), Blue Food Coloring, Water

1. Add light-colored pebbles to a rectangular container and mold the rocks into a hill against one side of the container at a 45 degree angle.
2. Add a layer of soil to cover the rocks and pat the soil down gently.
3. Use moss (or grass clippings) to form a layer of vegetation on the hill.
4. You will need two paper cups – poke 15-20 holes in the bottom of one cup using a sharpened pencil (to create a “rain can”); fill the other cup with water and add a few drops of blue food coloring to make “rain.”
5. Hold the cup with holes in the bottom over your container & pour the blue water in to make it rain.
6. Watch what happens as the water flows over the land, seeps through the soil, and flows between the rocks.
7. Do you see surface water on one side and groundwater (“an aquifer”) on the other side?
8. Now, take the spray nozzle from a spray bottle and push it down into the rocks to meet the water.
9. Pump the nozzle until water starts to spray out. This represents groundwater use or “withdrawl.”

Source: The University of Waikato