



Groundwater

Everyone lives in a watershed. A watershed is the area of land from which all water drains to a given point. There are many threats to our water supplies. Rainwater flows down the hills, fields, city streets, suburban backyards, eroded construction sites and shopping mall parking lots. The runoff picks up sediment, fertilizers, pesticides and contaminants. Some of these pollutants seep through the soil into the groundwater. As you will soon discover the natural conditions and human activity in a watershed directly affect the quality of water on the surface and underground.

Materials:

- Clear glass or test tube
- 2 cups of sand
- Eyedropper
- 1 cup of water
- 3 tablespoons Kool-Aid or other powdered drink mix

Procedure:

1. Fill the glass or test tube $\frac{3}{4}$ full with sand.
2. Add water to the glass making sure not to saturate the sand.
3. Observe as the water flows through and around the sand particles. This is percolation.
4. Add a "pinch" of Kool-Aid to the surface of the sand. This represents a soluble pollutant (it will dissolve in water).
5. Slowly add more water. Observe the pollutant as it dissolves and flows in solution through the sand.