

## Activity: Soil Moisture and Runoff

Name: \_\_\_\_\_

### Materials needed (for every 2 students):

Name: \_\_\_\_\_

- A jar of water
- A tray or other container which will catch water
- About 100 ml (half cup) of each of a variety of soils
- A funnel
- A graduated cylinder (or a teaspoon)
- Filter paper disks folded into cones, one for each soil type

### Pre-Lab Discussion Questions

1. Prior to starting the activity discuss the following questions:
  - From where does ground water come?
  - What causes streams and rivers?
  - Do different types of soil hold different quantities of water?
  - Explain that the funnel is used to 'channel' the water once the soil has absorbed all it can hold.

### Procedure:

1. Every 2 students will put a cone of filter paper in a funnel.
2. Place 100 ml (about 1/2 cup) of dry soil in the funnel and tamp the soil gently.
3. Pour 5 ml (about one teaspoon) of water onto the soil every 30 seconds until water appears at the bottom of the funnel.
4. Repeat the experiment with the other soils and a new filter cone.
5. Have students describe what process happens between the water and land to form streams.

### Post-Lab Discussion Questions

1. After the activity answer the following questions with a partner:
  - How did you know the soil was saturated?
  - What happened to the water once the soil was saturated?
  - Where does water go after it runs to a stream? (List at least 2 possibilities.)

