



2. If some of the soil is stuck together in lumps, gently break up the lumps with your fingers before starting the investigation.

Crouch down so that you can see the cups from the side.

Have one person very gently pour about 60 mL (1/4 cup) of soil into one of the plastic cups.

Observe how the soil materials fall through the air inside the cup.

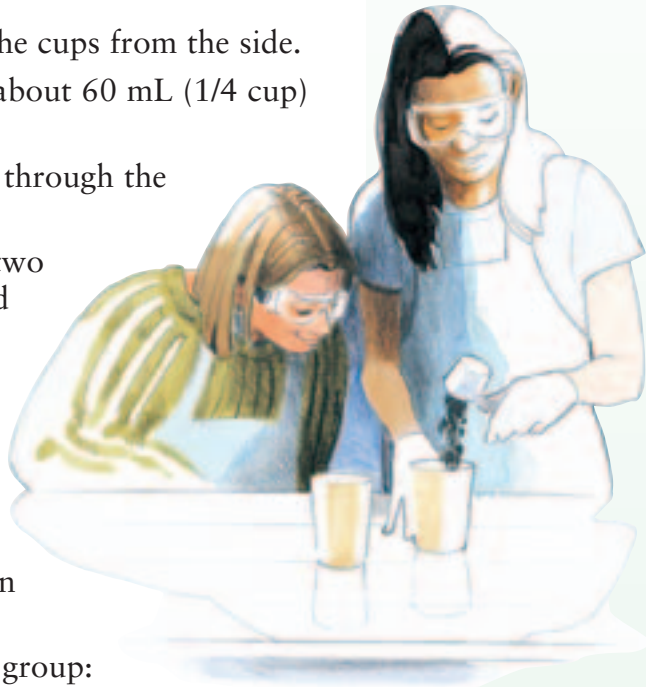
Repeat the pouring and observing two more times. Take turns pouring and observing.

- a) Record all the observations you can make about how soil falls through air. It may be useful to make a drawing to show your observations.
- b) Describe how the soil looks when it reaches the bottom of the cup.

3. Discuss this question in your small group: What would happen to the soil if it were poured into water instead of air? Why is that?

Based on what you already know, make a prediction.

- a) Write down your prediction.
  - b) Write down the reason for your prediction.
4. Fill the second plastic cup 3/4 full of water. When the water is still, gently pour about 60 mL (1/4 cup) of the soil into the cup and observe. Repeat your observations two more times, starting each time with a fresh cup and clear water.
    - a) What happens when the soil meets the water?
    - b) What happens to the soil as it passes through the water?
    - c) What happens when the soil reaches the bottom of the cup?



## Inquiry

### Making Predictions

*Making a prediction is not just guessing. Predictions are made based on all the information and evidence you already have. When making your prediction, you need to be clear about the reasoning that supports it. That is why giving the reason for your prediction is very important.*