



Slipping Soil

Materials

- baking pan
- newspapers
- water mister
- ruler

Procedure

- 1. Collaborate** Work with a partner. Spread at least two layers of old newspapers on a desk or table. Fill the baking pan about 1/3 full with soil.
- 2. Experiment** Gently pat the soil into a smooth, flat surface. Hold the ruler upright against one end of the pan. Raise this end very slowly. Stop when the soil begins to slip.
- 3. Measure** Record the height at which the soil began slipping. Then return any spilled soil to the pan and repeat step 2.

- 4. Use Variables** Repeat steps 2 and 3 again, this time adding 20 sprays from the water mister to the soil. Then repeat using 20 more sprays. Record your measurements.

Safety: Wash your hands after completing this procedure.

Name _____ Date _____

Conclusion

1. **Use Variables** How did water affect the height at which soil began slipping?

2. What did you learn by repeating the procedure? Discuss why scientists repeat experiments.

3. **Use Models** What process in nature does this procedure model? Describe an example of a natural event similar to the one you observed.

Hypothesize Would grass or other plants growing in the soil affect how soil slips? Form a hypothesis. Write the steps of a procedure to test your hypothesis.

Guided Inquiry