

**Experiment** Does the slope of land affect the amount of erosion caused by melting ice?

**Materials**

2 lids from shoe boxes

damp sand

aluminum foil

2 ice cubes

**Ask a question.**

Does the slope of land affect the amount of erosion caused by melting ice?

**State a hypothesis.**

Write your hypothesis.

**Identify and control variables.**

In this experiment, the variable you change is the slope of sand. The variable you observe is whether more erosion occurs on sloped sand or on flat sand. Other conditions, such as the lid, the amount of sand, and the ice cube must be controlled, or kept the same.

**Test your hypothesis.**

- 1 Cover the inside of both lids with foil to make them waterproof.

- 2 Fill each lid with the same amount of damp sand.
- 3 In one lid, shape a steep hill.
- 4 Smooth out the sand in the other lid so that it is flat.
- 5 Place one ice cube on top of the hill. Place another ice cube in the middle of the flat sand.
- 6 Observe the ice melting in each lid. Record our observation in a chart like the one below.

**State your conclusion.**

Draw conclusions based on your data.

**Data and Observations**

	Amount of Erosion
Flat Land	
Hill	