# Lab Directed Inquiry

## **Explore** How can you observe a mineral wear away?

Model the wearing away of a mineral. The chalk represents the mineral. The wearing away is caused by rocks and water.

#### **Materials**



plastic jar with lid



chalk



rocks



timer or stopwatch (or clock with second hand)



water

## process Skills

You infer when

you base ideas on **observations** Carefully comparing and contrasting observations can

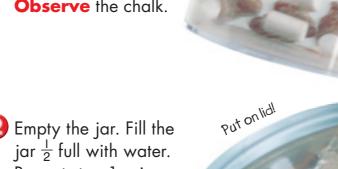
help you make

good inferences.

#### What to Do

Shake chalk and rocks in a jar for 1 minute. Look for changes in the chalk. Shake for 3 minutes more.

**Observe** the chalk.



Put on lid!

8 rocks

4 pieces of chalk

🛂 Empty the jar. Fill the Repeat step 1 using the same rocks, 4 new pieces of chalk, and water.

> water ( $\frac{1}{2}$  full) 8 rocks 4 pieces of chalk

### **Explain Your Results**

- 1. How did the chalk change after being shaken with rocks for 1 minute? for 3 more minutes? Compare and contrast your observations.
- 2. Infer Compared to shaking chalk with only rocks, what effect did shaking chalk with both rocks and water have on the chalk?