

## Formative Assessment #1

### Concept(s)

#### Addressed

Weathering of Earth Materials includes breaking of materials by mechanical or chemical means. Mechanical means refers to forces such as wind, water, or ice that break rocks into smaller and smaller pieces. Chemical weathering refers to interactions between the rock material, water, and air causing oxidation of specific minerals. Chemical weathering causes rock layers to loosen.

#### Time

20 minutes

#### Materials

Individual

Prompt

#### Advance

#### preparation

1. Duplicate prompt for each student

*Teacher Note: Assessment A is designed to provide patterns in student understanding through revealing what students know in open ended prompts and defining important concept ideas. These patterns are used to provide interventions in areas of greatest need.*

#### Procedure:

1. Tell students they will have an opportunity to share what they understand about chemical and mechanical weathering..
2. Distribute the prompt to each student and ask him/her to do his/her best work.



Name \_\_\_\_\_ Key \_\_\_\_\_

**Grade Six: Weathering and Erosion**  
*Assessment A*

**Directions:** Please answer in complete sentences.

1. Describe the process of mechanical weathering in your own words.

*Mechanical weathering is the movement of rocks that causes rocks to break against each other or crack from ice or water. Most mechanical weathering is caused by moving water.*

2. Identify two common examples of mechanical weathering that occur near your home or school.

Examples of mechanical weathering include any of the following:

A stream or river where rocks and sand tumble and move.

An area where wind blows material by “sand blasting” material.

3. Explain how chemical weathering is different from mechanical weathering.

Chemical weathering is an interaction between rock materials (minerals), water and air. The rock material is oxidized and becomes weaker and breaks easily. Mechanical weathering requires rock material to be moved and hit other rocks by a force. Glaciers may also move and scrape rock materials from one place to another which is also mechanical weathering.