

## EROSION/WEATHERING

**Directions: Use the terms below to complete the passage.**

Acid precipitation  
Mechanical

Carbonic acid  
Pressure

Carbon dioxide  
Temperature

Composition  
Water

The process by which rocks and minerals break down into smaller pieces is \_\_\_\_\_ weathering, also called physical weathering. Two factors that play a significant role in this type of weathering are \_\_\_\_\_ and \_\_\_\_\_. To some extent, the \_\_\_\_\_ of rocks determines the effects that chemical weathering will have on them. \_\_\_\_\_ is an important agent in chemical weathering because it can dissolve many kinds of minerals. An atmospheric gas that contributes to the chemical weathering process is \_\_\_\_\_, which is produced by living organisms. When this gas combines with water, it produces a weak acid called \_\_\_\_\_. Another agent of chemical weathering is \_\_\_\_\_, which is caused mainly by emissions of sulfur dioxide and nitrogen oxides.

**Directions: Answers must be in complete sentences and provide enough detail.**

1. Define mechanical weathering.
2. List a variety of factors that affect the rate of mechanical weathering **and** explain how they affect the rate.
3. Define chemical weathering.
4. List a variety of factors that affect the rate of chemical weathering **and** explain how they affect the rate.
5. What exactly *is* weathering?
6. Explain why weathering can *only* occur on the *surface* of the earth?
7. What is the basic difference between *mechanical* weathering (also called Disintegration) and *chemical* weathering (also called Decomposition)?
8. Describe in detail 3 types of mechanical weathering.
9. Describe in detail 3 types of chemical weathering.