

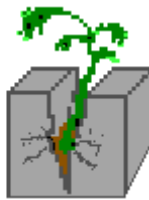
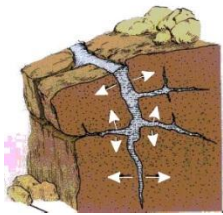
Physical

(Mechanical)

1. _____
Caused by: _____

2. _____
Caused by: _____

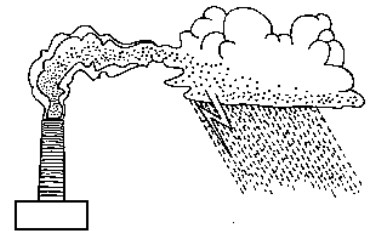
3. _____
Caused by: _____



Chemical

1. _____
Caused by: _____

2. _____
Caused by: _____



WEATHERING

Physical vs. Chemical Weathering Practice

Weathering includes physical (mechanical) weathering and chemical weathering. Physical weathering is any process that breaks up rock without changing its chemical composition. Chemical weathering is any process in which water, air, or other substances react with the minerals in the rock and change the chemical composition of the rock.

Decide if the following descriptions are examples of mechanical weathering or chemical weathering. Write the word "physical" or "chemical" in the blank at the left.

_____ 1. Moss growing on the surface of rocks, producing mini cracks in the rocks

_____ 2. The wedging of tree roots along natural joints in granite

_____ 3. Limestone dissolved by acid rain

_____ 4. The oxidation of minerals that contain iron

_____ 5. Animal burrows dug in rock that let in water and air

_____ 6. Repeated freezing and thawing of water that cracks rock

_____ 7. The action of water, salt, and air on car fenders and panels

_____ 8. Formation of potholes in streets during severe winters

_____ 9. Lifted sections of sidewalk along tree-lined streets

_____ 10. A small rock falling from a cliff

_____ 11. Feldspar mixing with acidic groundwater and producing clay minerals

_____ 12. Tree roots cracking the concrete foundation of a house

Name: _____

Date: _____

Exit Slip

This is a statue of Sophia. Doesn't she look thrilled?!

If you poured acid on this statue, would you be weathering it chemically or physically?

If you took a nail file and filed away at the statue, would you be weathering it chemically or physically?

If you took a hammer and smashed this statue, would you be weathering it chemically or physically?

If you smashed the statue with the hammer, you have weathered it. Now you carry those pieces of statue to the dump. What process is this?

List three things that can weather a rock physically:

- 1.
- 2.
- 3.

List the two things that can weather a rock chemically:

- 1.
- 2.

