

Lesson 19-Weathering, Erosion and Deposition

KEY TERMS

deposition

earthquake

erosion

fault

lava

magma

volcano

weathering

OBJECTIVE

⇒ Tell the difference between weathering, erosion and deposition

Weathering is the changing of rocks near the Earth's surface into smaller pieces through the actions of natural elements such as *wind, rain, heat, wave action, ice and snow*. The Earth's surface is constantly changing and breaking down due to the process of weathering and the effects of erosion. Weathering occurs because of the changes in temperature and exposure to water and air. Weathering breaks rocks into smaller

pieces while **erosion** carries these weathered materials from one place to another. Once the rock is weathered and eroded, *water, wind, ice and gravity* deposit weathered material from the rocks to other places. This process is known as **deposition**.

Weathering

The **BREAKING DOWN** of rock. Weathering agents include:

Water Ice
Wind Animals
Growing Plants



Erosion

The **MOVEMENT** of sediment from broken rock. Erosion agents include:

Water Ice
Wind Gravity



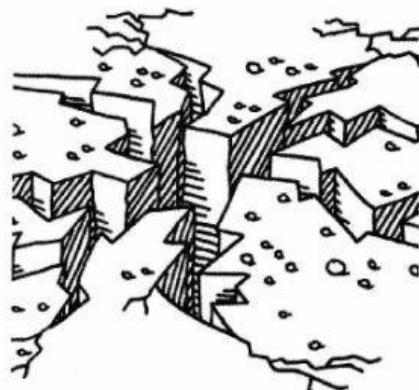
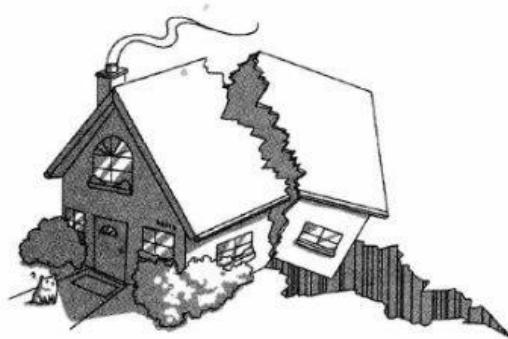
Deposition

The **DROPPING** of sediment in a **NEW** place. Examples of deposition are:

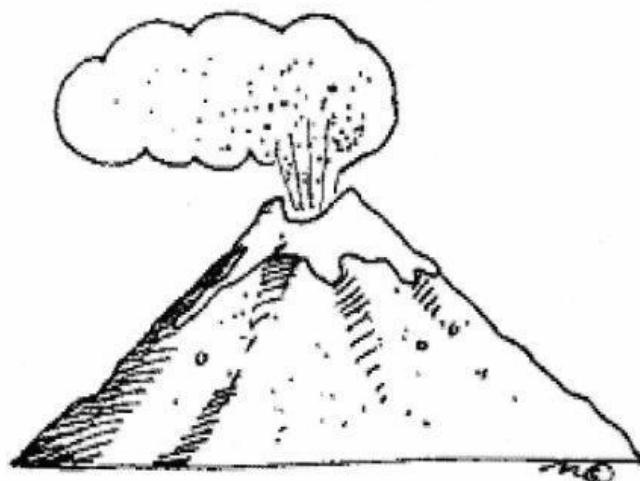
Formation of an island
Sand dunes



Earthquakes cause rapid changes on Earth. An **earthquake** is a vibration or shaking of Earth's crust. Most earthquakes occur along faults. A **fault** is a break in the crust along which rocks move. Rocks on either side of a fault can move up and down, side to side, or both. Earthquakes are measured on a *Richter Scale* which uses numbers from 1 to 9, with 9 having the greatest impact.



A **volcano** is a mountain that forms when red, hot melted rock flows through a crack onto the Earth's surface. Melted rock inside the Earth's mantle is called **magma**. Melted rock that reaches Earth's surface is called **lava**. The lava and gases that erupt from volcanoes are very hot and often destroy everything in their path. Volcanic eruptions also form a new crust on continents.



Weathering, Erosion and Deposition-Assessment

Name: _____

Date:

The pictures below show aspects of weathering, erosion and deposition. Use the pictures to answer the following questions correctly.

Weathering



Erosion



Deposition



1. Complete the table below by matching the term from **Column B** with its correct definition in **Column A**. Write the LETTER on the lines provided. [3]

COLUMN A	COLUMN B
_____ The moving of broken rocks and soil from one place to another	A. deposition
_____ The wearing away or changing of rocks into smaller pieces	B. erosion
_____ The carrying of weathered rocks or soil to a new location	C. weathering

2. Which **TWO** of the following are agents of **weathering**? Shade in the LETTERS next to the correct answers. [2]

Send settles on the beach after sunset, when it is most likely to be calm. Send a note to the beach master.

3. Sand settles on the beach after waves place it there. Is this an example of weathering or deposition? Circle your answer. [1]

weathering

deposition

4. What is an **earthquake**?

[1]

5(a) Which **tool** is used to measure an **earthquake**? Shade in the LETTER next to the correct answer. [1]

(A) anemometer (B) richter scale (C) thermometer (D) wind vane

5(b) What is the difference in damage between an earthquake that measures number one and an earthquake that measures number nine on the instrument mentioned in 5(a)? [2]

6. Complete the statement below .

[2]

Melted rock inside the Earth's mantle is called _____, but melted rock that reaches the Earth's surface is called _____.

TOTAL MARKS-12