

Name: _____ Date: _____ Period: _____

Weathering & Erosion – Quiz Review Guide

(1) Weathering vs. Erosion

- **Weathering:** Breakdown of rocks due to physical or chemical changes.
- **Erosion:** Weathered rock (sediments) is carried away by _____, _____, _____ and _____.

(2) Mechanical Weathering: (aka Physical Weathering) Changes rocks size and shape, but not composition

Make the Match!

- | | |
|---------------------|---|
| _____ Frost Wedging | A. Particles in the wind or water rub against other rocks wearing them down creating a smoother rock |
| _____ Plant Roots | B. Roots grow inside the crack of a rock. As the roots grow in size the pressure exerted cracks the rock further. |
| _____ Abrasion | C. Sheets of rock peel off a rock face |
| _____ Exfoliation | D. Water enters a crack in the rock, the water freezes and expands, widening the crack in the rock. |

(3) Chemical Weathering: Changes rocks composition by chemical reactions

Make the Match!

- | | |
|----------------------|---|
| _____ Hydrolysis | A. Oxygen reacts with minerals (especially those containing iron) |
| _____ Oxidation | B. Water reacts with minerals |
| _____ Carbon Dioxide | C. A gas that dissolves in water to form carbonic acid (a weak acid) |
| _____ Acid Rain | D. A strong acid that forms with sulfur dioxide and water in the atmosphere |

(4) Order the following types of sediment from largest to smallest

Word Bank

Cobbles
Sand

Clay
Boulders

Silt
Pebbles

Largest

Smallest

(5) Variables that Affect the Rate of Weathering

#1 _____ – Temperature and moisture levels in an area over a long period of time

- _____ – Best for _____ Weathering (more freezing)
- _____ – Best for _____ Weathering (more CO₂ from rich plant life)

#2 _____ – Soft rocks (limestone) weather faster than harder rocks (granite)

To a lesser extent:

#3 _____ – _____ surface area increases the rate of weathering. Weathering creates more surface area

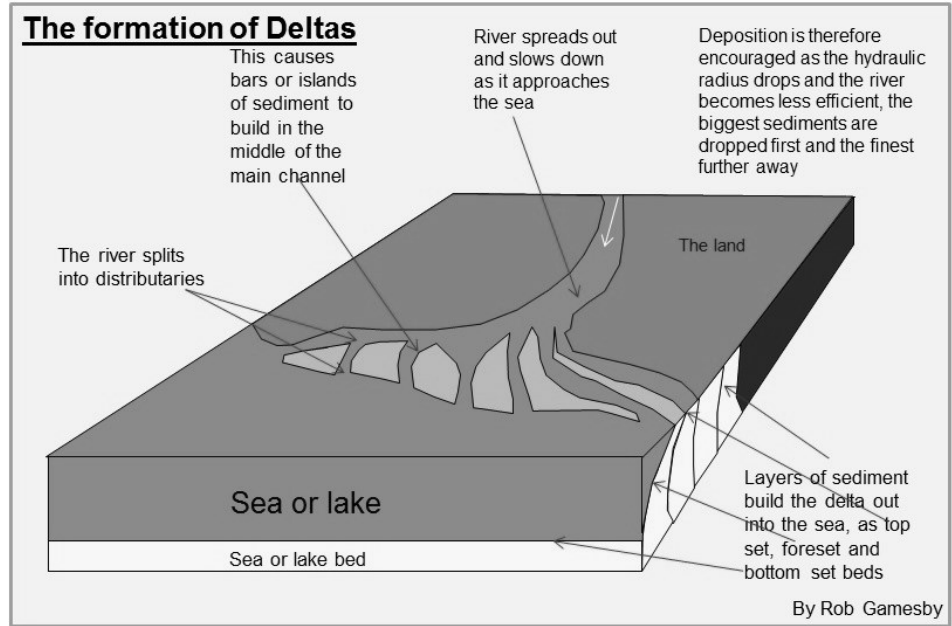
#4 _____ – Materials on steep slopes undergo more change

(6) Review your Web Quest from Tuesday! Paying special attention to the following:

1. (Website #2) What are the four agents of erosion?

2. (Website #3) What is deposition?

3. (Website #4) What are deltas and how are they formed?



4. (Website #5) What is contour farming and why do we do it?

5. (Website #5) What is a rain barrel and how is it beneficial?

6. (Website #5) What makes up a buffer strip and how is it beneficial?

(7) Concept Map

Prepare a concept map for weathering, erosion and deposition. Be sure to use the following terms. Use as many other linking words and terminology that you wish.

Weathering
Water
Transports sediments
Sediments settle

Erosion
Slowing water
Wind
Deltas

Deposition
Ice
Gravity
Chemical

Preventing Soil Erosion
Mechanical
Break down rocks
Buffer Strip