

## Constructive and Destructive Process Study Guide

vocabulary:

- ✓ LANDFORM - A physical feature on the earth's surface; different types of landforms can be found on page 35
- ✓ WEATHERING - the slow process that breaks down rocks into smaller pieces
- ✓ EROSION - the process of weathered rock moving from one place to another; can be caused by gravity, running water, and wind
- ✓ DEPOSITION - the process of eroded materials being dropped off in another place
- ✓ SEDIMENT - the matter which falls to the bottom of oceans and lakes
- ✓ SAND DUNE - different forms and sizes based on their interaction with the wind; the wind forms the shape of the sand dune
- ✓ CANYON - a deep ravine between cliffs often carved from the landscape by a river
- ✓ PLATE TECTONICS - a theory that explains how forces deep within the Earth can cause ocean floors to spread and continents to move
- ✓ MOUNTAIN - when a plate is compressed, the crust is forced upward producing folded mountains
- ✓ PHYSICAL WEATHERING - Rocks can change size and shape without changing their chemical properties; can be caused by ice, wind, water, gravity, plant roots growing, animals burrowing (pages 38-39)
- ✓ CHEMICAL WEATHERING - breaks rocks into smaller pieces by changing the the minerals that make up rocks; can be caused by water, oxygen, acids, carbon dioxide, and living things (pages 40-41)

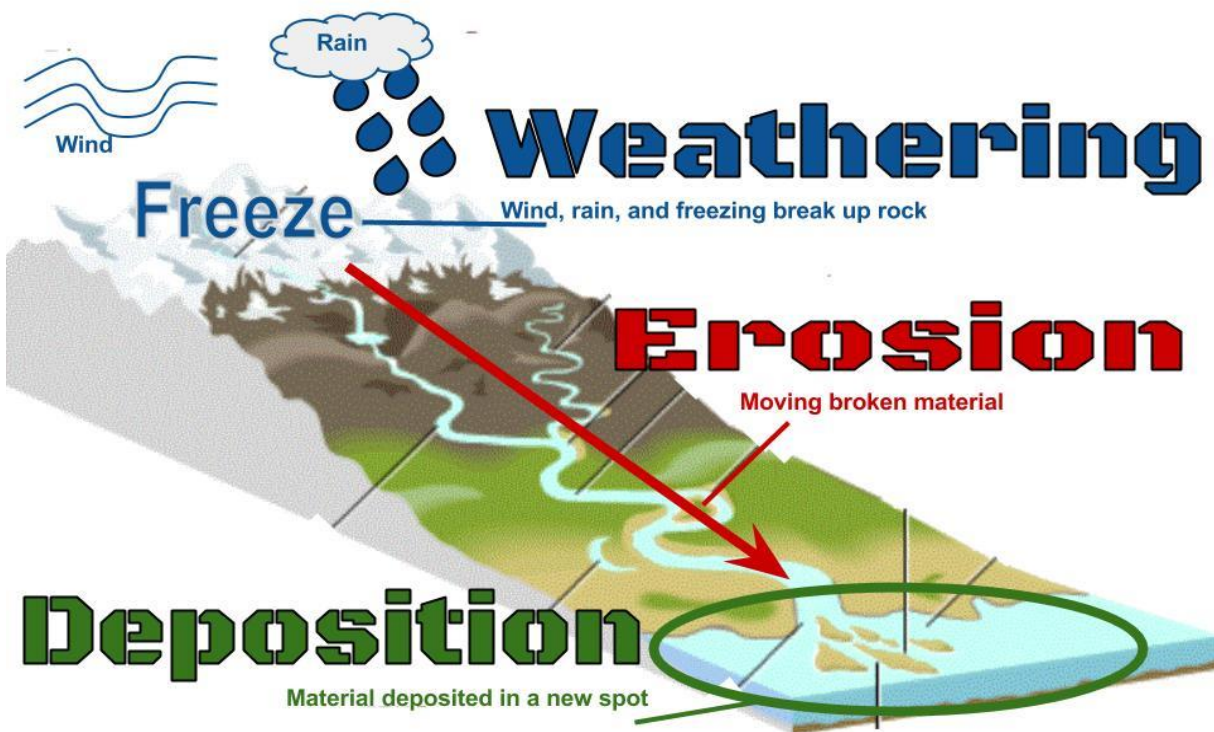
CONSTRUCTIVE PROCESS - a force or process that builds landforms; some examples include:

- ✓ deposition due to river flowing. Rivers carry sediments toward the ocean to form shoreline sediment features, such as sand bars and barrier islands.
- ✓ A volcano slowly erupting lava over time can form a volcanic mountain.
- ✓ Plates colliding, compressing and folding rock layers can form a mountain.

DESTRUCTIVE PROCESS - a force or process that breaks things down; some examples include:

- ✓ Chemical weathering
- ✓ Erosion -gravity, ice, wind, water
- ✓ Explosive volcanic eruptions -Mt St Helens
- ✓ Glaciers carving out bowl-shaped depressions
- ✓ Wind carrying small particles in the desert
- ✓ Water carves out river valleys thousands of feet over millions of years

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Parent material  
(rock)



Biological  
weathering  
(tree roots and  
lichens)

Chemical  
weathering  
(water, acids,  
and gases)

Physical  
weathering  
(wind, rain,  
thermal expansion  
and contraction,  
water freezing)



Particles of parent material