

Chapter Nine

Science Study Guide

Vocabulary:

Landform: A natural feature on Earth's surface (ex: A plateau is a flat landform found on high ground)

Weathering: The process where rocks in Earth's crust are slowly broken into smaller pieces

Erosion: The process where water, ice, gravity, and wind can work together to move weathered pieces of rock

Deposition: The process by which parts of Earth's surface are built up (the laying down of pieces of rock)

Landslide: Rapid changes to Earth's surface as large amounts of rock and soil move downhill

Volcano: A landform that forms at a weak spot in Earth's crust as magma is forced upward and reaches the surface - Magma flowing out of a volcano is known as lava

Fault: Break or crack in rocks where Earth's crust can move

Earthquake: The sudden movement that causes Earth's crust to shake

Epicenter: The point on Earth's surface directly above the focus of an earthquake - Damage from the earthquake is usually the greatest on the surface near the epicenter

Key Points:

- ◆ Glaciers erode land by wearing away bits of rock and soil and then carrying them long distances
- ◆ Rainwater plays a part in both physical and chemical weathering - The rainwater mixes with gases in the air to form acids that combine with rock material
- ◆ Chemicals cause the material in rocks to change into different materials
- ◆ Ice and plant roots both cause physical weathering. Both can get into a crack and cause the rock to split
- ◆ Gravity pulls loosened material down hills and piles the material at the bottom of the hill
- ◆ Waves are the cause of erosion that changes the shape of a shoreline
- ◆ One way to control erosion along the seashore is to build barriers to stop waves from carrying sand away

- ◆ Most deposition takes place where rivers flow into the ocean
- ◆ Farmers can plow hilly fields in steps called terraces to help control erosion - the terraces slow the speed of water running downhill
- ◆ Farmers also control erosion by having plants so the roots hold the soil in place
- ◆ Volcanoes can be classified as active (one that has frequent eruptions or shows signs of future eruptions), dormant (one that has not erupted for a long time), or extinct (one scientists do not think will erupt again)
- ◆ Violent volcanic eruptions can produce incredible amounts of rock and ash
- ◆ Earth's crust is found over its entire surface