Chapter 12 Notes
Section 12.1 – Volcanoes and Earth's Moving Plates

Volcano- opening in Earth that erupts gases, ash and lava

Earth has more than 600 active volcanoes.

World's most active volcano – Kilauea – Hawaii

Iceland – active volcanoes – divergent boundary – known as the Land of Fire and Ice

Effects of Eruptions

1) **Lava destroys everything it touches**
2) **Volcanic Ash – collapse buildings, block roads, cause lung cancer**
3) **Acid Rain Forms**

Pyroclastic Flow – Debris and Volcanic Ash that rush down the side of the volcano

How Do Volcanoes Form?

1) **Heat and pressure form magma**
2) **Magma is less dense than rock so it is forced to Earth's surface**
3) **Magma flows out an opening called a vent**

Crater – steep walled depression around a volcanoes vent

Where do Volcanoes Form?

1) **Where plates move apart – divergent boundaries**
2) **Where plates move together – convergent boundaries**
3) **Hot spots**

Divergent Plate Boundaries

- **Mid – Atlantic Ridge – Iceland**
- **Where plates separate, rifts are forms – lava flows from rifts and is cooled by seawater**
- **Islands can be formed**

Convergent Plate Boundaries

- **Plates move together**
- **Oceanic Plate slides below a Continental Plate or another Oceanic Plate**
- **Example – The Andes Mountains in South America**
- **Volcanoes that form here are more violent.**

Hot Spots – hot rock is forced toward the crust where it partially melts – Example – Hawaiian Islands

***** Hot Spots do not form at plate boundaries**

Hawaiian Islands

- **They are all in a line – Pacific Plate is moving over a hot spot**
- **Kauai is the oldest**
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