Earth Science Power Point Notes (part 5)

The Plate Tectonics Theory- states that Earth's surface is broken into large, rigid pieces that move with respect to each other.
Lithosphere

- the crust and uppermost part of the mantle
- It is broken into large pieces called Tectonic Plates

Tectonic Plates

- move slowly over Earth's surface
- form mountains, volcanoes, and cause earthquakes

Asthenosphere

- partially melted portion of the mantle below the lithosphere
- hotter than the lithosphere
- bends more easily

There are 15 large tectonic plates.
We live on the North American plate.

Divergent boundary- where two plates move away from each other

- Example= Mid-Atlantic Ridge

Convergent boundary- where two plates move toward each other
Subduction-when one tectonic plate moves under another tectonic plate
Transform boundary- two plates slide past each other.

- Example= San Andreas Fault

Convergent boundaries form mountains and volcanoes.
Scientists use the Global Positioning System (GPS) to track the movement of plates.
Convection- the circulation within fluids caused by differences in density and thermal energy
Subduction also causes plate movement.