Chapter 10 – Earth Science

Section 10.1 – Continental Drift

Continental Drift – Hypothesis that continents have moved slowly to their current locations

Wegener suggested that the continents broke apart 200 million years ago.

Pangea – "All Land" – Large Landmass

Support for Pangea

1) **Fossils of Animals – Fossils of the same extinct reptiles were found in South America and Africa**
2) **Fossils of Plants**
3) **Climate Clues – Warm weather plants were found in Arctic areas**
4) **Glacial Deposits – found in warm areas**
5) **Similar Rocks – found on different continents**

Section 10.2 – Seafloor Spreading

-Using sound waves, scientists discovered an underwater system of mountains.

- **Underwater ridges contain rift valleys where volcanic eruptions and earthquakes occur.**

<u>Seafloor Spreading</u>

1) **Hot, less dense material rises at the mid-ocean ridges.**
2) **The material flows sideways carrying seafloor in both directions**
3) **New seafloor is created**
4) **Older seafloor moves away from the ridge**

***Youngest rocks are located at the mid-ocean ridges**

<u>Evidence of Seafloor Spreading</u>

1) **Ages of Rocks**
2) **Magnetic Reversals**