Drifting Continents - Chapter 1, Section 1.3

- 1. What is the theory of **continental** drift?
 - ➤ About 300 million years ago, all of the continents had been joined together in a single landmass. This giant landmass was called Pangaea.
 - ➤ Over millions of years, PANGAEA <u>drifted</u> apart and moved <u>all</u> over the Earth's surface.
- 2. What scientist came up with this theory?
 - ➤ A German meteorologist Alfred Wegener.
- 3. What major evidence did Wegener use to prove his theory?
 - **>** land features
 - **>** fossil
 - **>** climate
- 4. Evidence from **land features**.
 - > South America seems to fit into Africa.
 - A mountain range in South America lines up with a mountain range in Africa.
 - > Rocks are the same type and age.
- 5. Evidence from **fossils**
 - Fern fossils have been found in rocks in Africa, South America, Australia, India, and Antarctica.
 - > <u>Seeds</u> were too large to be carried by <u>water or wind</u>, so how were they dispersed? The continents were probably <u>joined</u> together.
 - Animal (reptile) fossils were also found on widely separated continents. Animals could not **swim or fly** across the oceans, so continents were probably joined together.
- 6. Evidence from **climate**
 - ➤ An island in the Arctic Ocean is **ice** covered and has a harsh polar climate, VERY COLD! Fossils of **tropical** plants are found there.
 - ➤ How? 300 million years ago the island must have had a mild **tropical** climate. The island was probably close to the **equator**.
 - ➤ South African rocks have deep **scratches** formed from **glaciers**. Now the climate is **mild**.
 - > South Africa was probably located closer to the South pole.
- 7. THE EARTH'S **climate** did not change, the position of the continents changed!