

Chapter 6, Lesson 3: Evolution and Plate Tectonics

Continental Drift

1. Earth's surface slowly changes over time.
2. Earthquakes provide evidence for Earth's changing geology.
3. Theory of Continental Drift developed in 1912.
4. Continental Drift suggests that the continents were once connected.
5. When plates, the environment changes and so do animals trapped on the moving plates.
6. These changes happen slowly and cause "Natural Selection" to occur.

Geographic Isolation

1. This occurs when a physical barrier (Like an ocean.) separates animal populations.
2. Once separated, these animals might follow different evolutionary paths.
3. The geography of a place can affect it's growth.

Does Geologic isolation influence evolution?

1. Darwin found many animals on the Galapagos were similar, but different to ones found on the mainland of South America.
2. These differences are due to "Geographic Isolation."

What is Convergent Evolution?

1. Sometimes animals on distant locations with similar environmental conditions have species with similar traits.
2. They evolved separately, but under similar environmental conditions.

How are plate tectonics and evolution related?

1. Earth's moving plates have caused evolution.
2. Changes in climates (environment), from moving plates, have caused evolution.
3. Species can become extinct if these changes are dramatic.