

Unit Objectives: Plate Tectonics

By the time this unit is over, you should be able to:

- Know the sequence of the major events in the Earth's history as well as the major eras
- Define the key terms of radioactivity including decay, isotopes and half-life
- Calculate the age of rocks and fossils based on radioactive decay
- Describe and identify the Earth's major plates
- Describe each plate boundary and understand the forces behind each
- Explain what a "hot spot" is and how it provides evidence for plate movement
- Understand the evidence that supports the idea of Pangaea
- Describe how plate tectonics is responsible for the geologic activity at the Earth's surface

Vocabulary

- Theory of Plate Tectonics

- Pangea

- Alfred Wegener

- Seafloor spreading

- Divergent plate boundary

- Rift valleys

- Convergent plate boundary

- Transform fault

- Hot Spot

- Radiometric dating

- Half-life

- Geologic Time Scale (identify the main characteristics of the time periods)
 - Paleozoic
 - Mesozoic
 - Cenozoic
 - Precambrian