Earth Science Chapter 5: Study Guide

## Section 1

• Definitions		
Seismic waves	Granite	Outer core
Pressure	Mantle	Inner core
Crust	Lithosphere	
Basalt	Asthenosphere	
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- Know the two main types of evidence that scientists use to learn about Earth's interior
- Know the three main layers of Earth's interior
- Know in what direction temperature and pressure increase
- Know where the crust is thickest and thinnest
- Know the three parts of the mantle and how they are arranged
- Know the two parts of the mantle and what they are made of
- Know about the magnetic field and what we think creates it

# Section 2

• Definitions

Radiation Conduction Convection Density Convection current

- Know what heat transfer is
  - Know the three types of heat transfer
  - Understand how a convection current works and how it relates to the heating of the earth

# Section 3

• Definitions

Continental drift

Fossil

• Know who Alfred Wegner is and what he proposed

Pangea

- Know the three types of evidence that Wegner gathered to support his idea
- Understand why Wegner's idea was reject; what part of his proposal didn't coincide with evidence

## Section 4

• Definitions

Mid-ocean ridge	Sea-floor spreading	Subduction
Sonar	Deep-ocean trench	

- Understand how sonar was used to located mid-ocean ridges
- Know who Harry Hess is and what he discovered and proposed
- Understand the process of sea-floor spreading and know which rock is the newly formed rock and which is the oldest rock
- Know the three types of evidence that supports sea-floor spreading
- Understand the process of subduction, where it occurs and why

# Section 5

• Definitions

Plate Scientific theory Plate tectonics Fault Divergent boundaries Rift valley Convergent boundary Transform boundary

- Know who J. Tuzo Wilson is and what he observed and proposed
- Know what the theory of plate tectonics is
- Know what plate boundaries are and where they are located
- Know the three kinds of plate boundaries
- Understand the type of plate movement along each type of boundary
- Understand that plates are constantly in motion, even before the formation of Pangea