**Ch. 12 Plate Tectonics**

Essential Question: What are three types of plate boundaries?

1. Theory of Plate Tectonics
	1. J. Tuzo Wilson (1965)
	2. Lithosphere is broken into separate sections called plates.
	3. Combined evidence about plates, continental drift and sea-floor spreading
	4. Explains the formation, movement and subduction of Earth’s plates
	5. Scientific theory - well tested idea that explains a wide range of observations.
2. Theory Highlights
	1. Plates float on asthenosphere
	2. Convection currents rise toward and spread out under the lithosphere
	3. Convection currents cause plates to move, making changes in Earth’s surface (volcanoes, earthquakes, mountain ranges, deep ocean trenches)
3. Plate boundaries – the edges of plates where 2 plates meet.
	1. Fault – rocks slipping past each other at a boundary
	2. Types of boundaries
		1. Transform boundary – 2 plates slip past each other moving in opposite directions
			1. Frequent earthquakes



* + 1. Divergent boundary – 2 plates move apart
			1. Usually at mid-ocean ridge
			2. 
		2. Convergent boundary – 2 plates move toward each causing a collision
			1. 2 ocean plates or 1 ocean and 1 continental plate meet = subduction and formation of a trench
			2. 2 continental plates = mountain formation