

LEARNING OBJECTIVES

- 1) Describe the source and location of the *energy* driving Plate Tectonics, and how the heat traveling outward towards the surface moves the Earth's surface as plates.
- 2) List the two kinds of plates (or crusts) on earth and the terms for the three main plate interfaces as these plates move around the surface of earth. Describe what happens at these three plate boundaries.
- 3) Explain why Earth is still hot at its interior (compared to Mars, Mercury and the Moon) and the three things needed to occur for a magnetic field to exist in that planet.

Required Textbook readings for class 7: pages 125 – 132

1. What is occurring at the seafloor spreading centers? What drives the motion of plates?
2. Describe the difference between continental and seafloor crust. Why is seafloor crust so young?
3. What happens at subduction zones? What crust is formed and what crust is lost? Give an example on Earth.
4. Provide an example of a fault zone and a hot spot on Earth describe what is occurring to create these geological events.
5. What is required to retain a magnetic field on a planet? (three properties)
6. How might a planet lose its atmosphere? (three ways) How does a magnetic field help retain Earth's atmosphere?
7. Why doesn't Mars have a magnetic field? Why doesn't Venus have a magnetic field?