**Earth’s Layers, Tectonic Plates and**

**Sea-Floor Spreading Study Guide**

*Textbook Chapters*

Chapter 6, Sec. 1 and 2: Pgs. 136-146

*Study Guide Questions*

1. What does “composition” mean?
2. Name and describe the three *COMPOSITIONAL* layers of the Earth. (know what it is made of, it’s thickness, and temperature)
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_
      1. Composition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      2. \_\_\_\_\_\_\_km thick
      3. Temperature:\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      1. Composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      2. \_\_\_\_\_\_\_km thick
      3. Temperature:\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      1. Composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      2. \_\_\_\_\_\_\_km thick
      3. Temperature:\_\_\_\_\_\_
3. What are the five *MECHANICAL* layers of the Earth, what are their compositions and how thick are they?
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_: composition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_km thick
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_: composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_km thick
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_: composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_km thick
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_: composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_km thick
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_: composition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_km thick
4. What is a ***tectonic plate***? Define it.
5. What type of crust(s) can a tectonic plate be made of?
6. Explain **Wegner’s Theory of Continental Drift.** What is some of the evidence for this theory?
7. What is ***pangea?***
8. What is a *mid-ocean ridge*? Give an example of a well known mid-ocean ridge.
9. Explain ***sea-floor spreading,*** and HOW it happens***.*** DRAW A DIAGRAM.
10. Does the oceanic crust get older or newer as you move AWAY from the center of a mid-ocean ridge? Explain why.
11. What is a ***magnetic reversal***?
12. What do the bands in the oceanic crust in the picture below mean? Why might it be evidence for sea-floor spreading?

