Study guide: Earth Layers & Tectonic Plates

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_

***6.E.2.1: Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density.***

1. What are the different layers of the Earth? From where you stand to the center of the Earth, what is their order?
2. Which two layers are actually sub-layers?
3. What is the outer core made of?
4. What is the inner core made of?
5. What is the oceanic crust made of? Continental crust?
6. What is the mantle made of?
7. What layer do you see every day?
8. Why is the inner core a solid?
9. What is a convection current? List two places within the Earth where it occurs.
10. How is Earth’s magnetic field created?
11. Which layer is the densest? The least dense?

***6.E.2.2:* *Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth.***

1. Draw the three different types of plate boundaries and **show which way** the plates move in each:

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| --- | --- | --- |
| Boundary:\_\_\_\_\_\_\_\_\_\_\_\_ | Boundary: \_\_\_\_\_\_\_\_\_\_\_\_ | Boundary: \_\_\_\_\_\_\_\_\_\_\_ |

1. How is new crust formed? What boundary forms new crust?
2. What process in the mantle makes the plates move?
3. How are volcanoes formed?
4. What caused the Hawaiian Islands to form?
5. How is a tsunami formed?
6. What causes an earthquake? What type of wave is this?
7. Which boundary destroys crust? Which doesn’t make or destroy crust?
8. Why does magma rise to the surface of the Earth?
9. Who is Alfred Wegener and what was his theory? What evidence did he use to support it? (Name at least 3.)
10. What is the difference between a mid-ocean ridge and a rift valley?