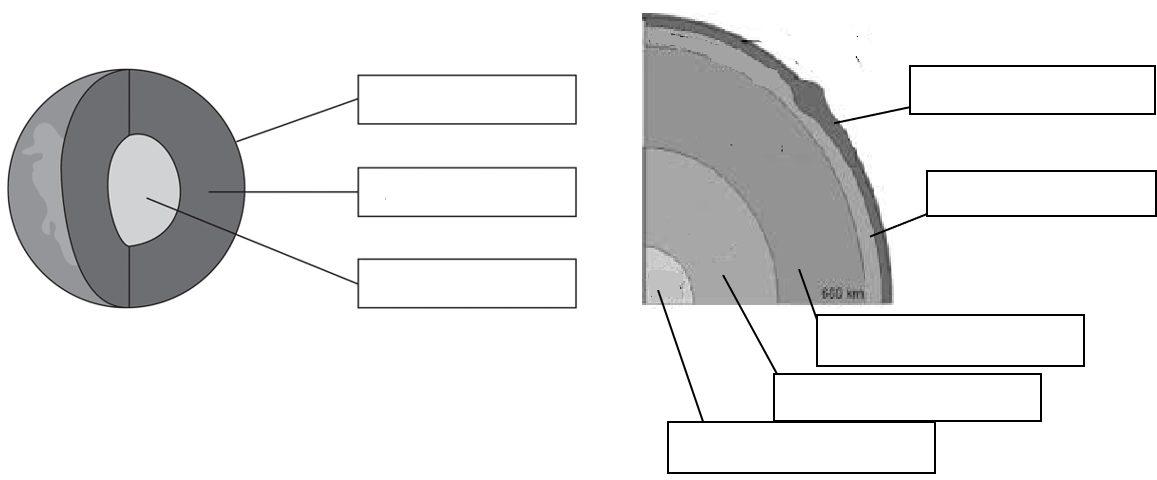
**Dynamic Earth Study Guide**

**\_\_\_Plate**\_\_\_\_\_\_ \_\_\_**Tectonics**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the theory that explains how large pieces of Earth’s \_\_**crust moves**\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| \_\_**Transform\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boundary**  The boundary between two tectonic plates that are \_\_\_**sliding\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_past**\_\_\_\_\_\_\_\_\_\_\_\_ each other laterally | \_\_\_**Divergent\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boundary**  The boundary between two tectonic plates that are \_\_**moving away**\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_  from each other. | \_\_\_**Convergent**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boundary  The boundary between two tectonic plates that **collide\_**\_\_\_\_\_\_\_\_\_\_\_ or \_\_**subduct**\_\_\_\_\_\_\_\_\_\_ (move under) the other.    **Continental – oceanic**: more dense \_**tectonic\_**\_\_\_\_\_\_\_ **plate\_\_\_\_\_\_\_\_** \_**subducts**\_\_\_\_\_\_\_\_\_ under continental crust.  **Oceanic – oceanic:** more \_\_\_**dense**\_\_\_\_\_\_\_\_ (older) crust \_\_**subducts**\_\_\_\_\_\_\_\_\_\_\_ under the less dense (\_**younger**\_\_\_\_\_\_\_\_\_) crust.  **Continental – continental**: more **dense**\_\_\_\_\_\_\_\_\_\_\_ (older) crust \_\_\_**subducts**\_\_\_\_\_\_\_\_\_\_ under the less dense (\_\_\_**younger**\_\_\_\_\_\_\_) crust. |
| What is formed:  -**Earthquakes** | What is formed:  On land: **rift valleys**  In ocean: **sea-floor spreading; mid ocean ridges** | What is formed:  Continental – oceanic: **Volcanoes, Earthquakes, Trenches**  Oceanic – oceanic: **Volcanic islands arcs, trenches, earthquakes**  Continental – continental: **Mountains** |
| Where is one located:   * **San Andreas Fault**   - | Where is one located:  -**Middle of Atlantic Ocean**  - | Where is it located:  Continental – oceanic: **Mount St. Helens**  Oceanic – oceanic: **Hawaii**  Continental – continental: **Himalaya Mountains** |

**Label the layers of Earth, after identifying which layers are chemical and physical.**

\_\_\_\_\_\_\_**Chemical**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Layers: \_\_\_\_**\_Physical** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Layers:



**Inner Core**

**Outer Core**

**Mesosphere**

**Asthenosphere**

**Lithosphere**

**Core**

**Mantle**

**Crust**