**Dynamic Earth Study Guide**

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

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| \_\_**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**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BoundaryThe 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**