Plate Tectonics "We Do"

1. Draw arrows to represent movement at each plate boundary.



Convergent Divergent Transform

2. What is causing the tectonic plates to move, causing these boundaries?

_____

_____

3. Place an X in the box that matches the event with the plate boundary:

Boundary	Volcanoes	Mountains	Earthquakes	Ocean Ridges
Convergent: Land/Land				
Convergent: Land/Ocean				
Divergent				
Transform				

4. What events that change the Earth's surface take place slowly?

Tectonic plate movement	Earthquakes
Volcanoes	Weathering, Erosion, Deposition

5. What events that change the Earth's surface take place rapidly?

Tectonic plate movement	Earthquakes
Volcanoes	Weathering, Erosion, Deposition

6. What caused Pangea to break up into the plates we know today?

Convection movement in the mantle	Rapid movement such as earthquakes

EXIT TICKET: *What are the different plate boundaries and how to they cause changes to the Earth's surface?*

Divergent boundaries	Convergent boundaries
Transform boundaries	Earthquakes

Plate Tectonics ESSENTIAL QUESTION:

_____

_____

Earth's Layers:

Crust: hard, rigid, _____, surface layer (_____ Crust is land, _____ Crust is the ocean floor).

Mantle: the layer below the crust:

- Lithosphere: Where the _____ meets the _____.
- Asthenosphere: hot magma, _____ -like. _____ _____ in the magma in this layer make the plates move.

Outer Core: Hot, _____, layer that surrounds the inner core. (Iron-Nickel)

Inner Core: Hot, _____, VERY _____ center of the planet. High _____ = solid. (Iron-Nickel)

What is Plate Tectonics?

The theory of plate tectonics states that the Earth's _____ is broken into a dozen _____ that are moving _____to one another as they ride atop the hot, _____ mantle.

- The entire Earth's surface is continually _____.

Convergent Boundaries:

Continental-Continental: Two _____ plates collide. Result: _____ building and earthquakes. (Ex. Himalayas)

Continental-Oceanic: One continental and one oceanic plate meet and the more _____ oceanic plate gets pushed _____ the continental plate (Ex. Ring of Fire)

Result: _____ and _____.

Oceanic-Oceanic: When they meet, the _____ plate gets pushed under the other. Result: _____ islands and _____.

Divergent Boundaries:

Where tectonic _____ are moving _____ from each other. Magma rises and new _____ is added.

Result: a mid- ocean _____, underwater _____.

Transform Boundaries:

Where two plates move (and _____) against each other in _____ directions. This creates _____ that is released when the plates move _____.

Result: _____ (Ex. San Andreas fault along the California coast.)