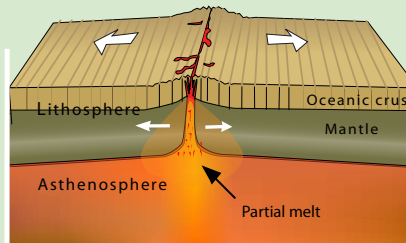




Divergent Boundaries & Spreading Zones

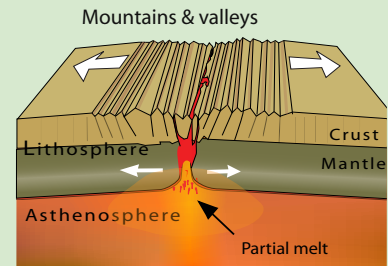
Spreading center—Fast



Divergent boundaries occur mostly along spreading centers where the magma rises forming new crust. (Ex. East Pacific Rise, Mid Atlantic Ridge.)

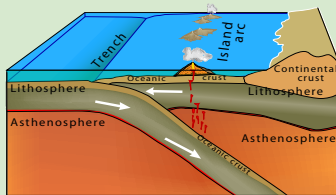
Spreading zones (no graphic) on continents create parallel mountains and valleys as the crust pulls apart (ex: Basin & Range, U.S. and the Great Rift Valley, Africa.)

Spreading center—Slow

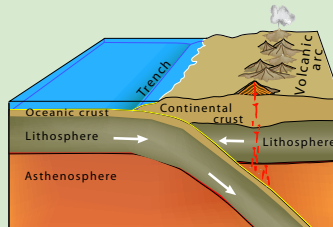


Convergent Boundaries

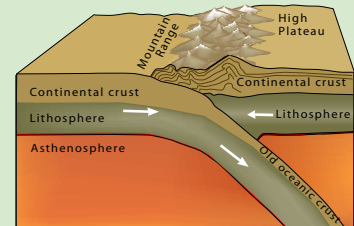
When two plates move toward each other, crust is destroyed as one plate dives (is subducted) beneath the other. The location where sinking of a plate occurs is called a subduction zone.



Ocean-Ocean—Ocean plate dives beneath another ocean plate; volcanic island chain forms above the zone (ex.: The Marianas)



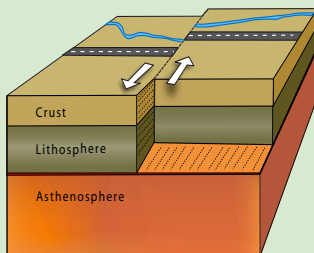
Ocean-Continent: Ocean plate dives beneath a continental plate. Volcanic mountain chain forms inland. (ex.: Cascade Range, Sumatra, Japan)



Continent-Continent: Two thick continental plates collide and buckle into high mountains. (ex: Himalaya Mountain Range.)

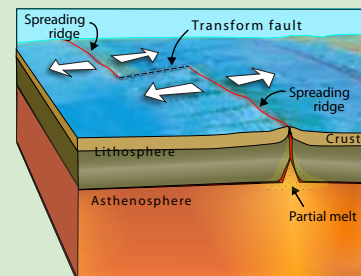


Transform Boundaries



Strike slip faults result from two plates moving horizontally in opposite directions (ex: San Andreas Fault, California).

As surrounding plates are driven by deep forces to move apart or crunch together, the in-between areas are pushed around on the surface. This forces them to slide past each other horizontally.



Transform faults are where two plates are moving away from a spreading ridge and fracture zones develop (ex: ocean floor)

Plate Tectonic Boundaries

Name _____

Date _____ Per _____

Complete the following Table.

Plate Boundary	Sketch	Definition	Real world Example
1. Convergent			
2. Divergent			
3. Transform			

1. Which of the above boundaries can produce earthquakes? Which produces the largest earthquakes?
2. Which of the above boundaries can produce volcanoes?
3. At which of the above boundaries is sea floor created?
4. At which of the above boundaries is sea floor destroyed?
5. What are the three sub-types of convergent plate boundaries?
6. What is the most studied transform fault in the world?