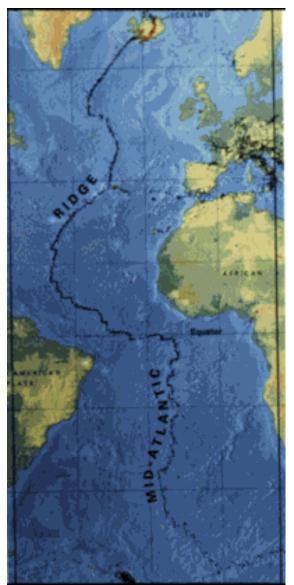
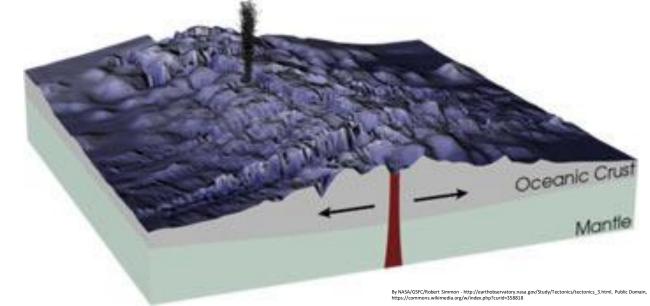
Diverging		Converging			Transform
PLATE PLATE ASTRUEBIOS PRIERE ASTRUEBIOS PRIERE		PLATE PLATE ASTRUEBOS PRIJERE ASTRUEBOS PRIJERE			PLATE PLATE ASTHENOSPHERE ASTHENOSPHERE
Oceanic Plate Divide	Continental Plate Divide	Oceanic Plates Converge	Continental Plates Converge	Oceanic and Continental Plate Converge	Any two plates slide past one another
Result:	Result:	Result:	Result:	Result:	Result:
Example:	Example:	Example	Example	Example	Example:

Oceanic Plate Diverging Boundary

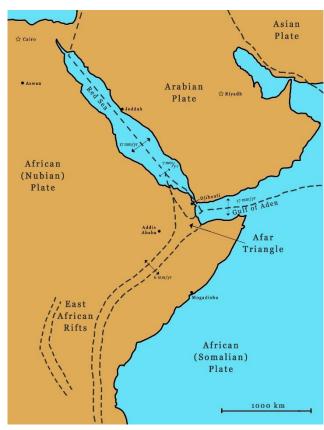


Diverging plate boundaries are most commonly found in the ocean. This is because the oceanic plates are thinner, and so it is easier for magma from the mantle to 'break through' oceanic plates. When this occurs, an oceanic ridge is formed. These are often referred to as 'mid-ocean ridges.' The ridge in the Atlantic is sometimes called the 'mid-Atlantic ridge.' At a mid-ocean ridge, new oceanic crust is created at vents (underwater volcanoes), where magma is escaping from the Earth. The crust is pushed outward, so as you move away from the ridge, the crust gets older.



Continental Plate Diverging Boundary

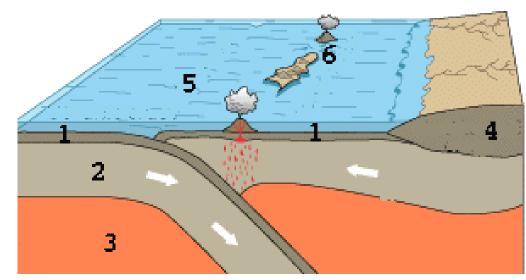




When magma breaks its way through a continental plate, causing it to push apart, it is a diverging plate boundary. The East African Rift is a current day continental plate diverging boundary. This does not happen often. Although there aren't volcanoes how we picture them, magma is making its way, very slowly, to the Earth's surface. As this happens, a rift is created. The continental crust often collapses, leaving vast cliffs, and large lakes. Eventually, there will be two separate continents, or a continent and an island.

Oceanic Plates Converging Boundary

When two oceanic plates converge, one is forced under the other. This is called subduction. The prefix 'sub' means 'below.' When the subducted plate reaches the asthenosphere, it melts. By melting, its density is lowered, so it rises back to the surface, melting through the ocean crust above it. This forms a volcanic island chain, or island arc. Some well known island arcs are the islands of Japan, or the Aleutian Islands.



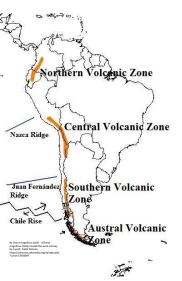


Continental Plates Converging Boundary

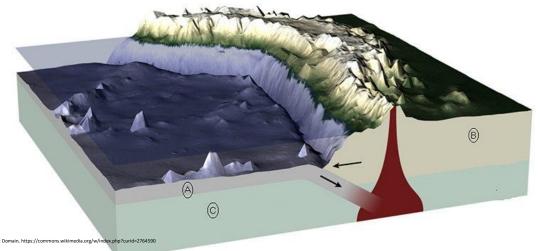
Continental crust is less dense than oceanic crust. When continental crust converges with continental crust, neither is subducted enough to melt. Instead, The crust is uplifted, creating folded mountains. Perhaps the most well known example is the formation of the Himalayan Mountains in India. This mountain chain was created when the Indian plate collided with the Eurasian plate.

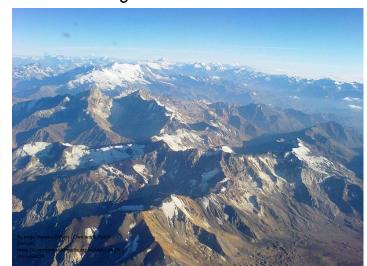


Oceanic and Continental Plate Converging Boundary

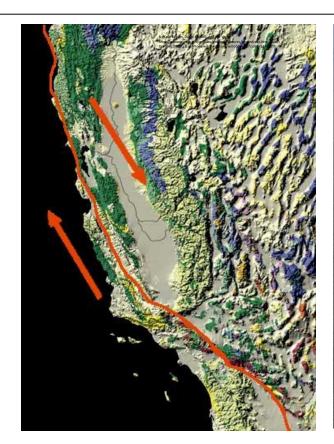


When oceanic crust converges with continental crust, the denser oceanic crust is always subducted. This leads to melting and volcanic mountains. The Andes Mountains, which run on the west coast of South America, were created by the subduction of the Nazca plate beneath the South American plate. As the plate is subducted, there can also be earthquakes.





Transform Plate Boundary





A transform boundary occurs where two plates are sliding past one another. At these locations there are many earthquakes. In California, the San Andreas fault is the source of the great many earthquakes that occur in that state. The Earthquake of 1906 was caused by a break in this fault line, and is one of the United States greatest natural disasters.