

# SCIENTIFIC TECTONIC PLATE BOUNDARY DESCRIPTIONS

<b>BOUNDARY TYPE</b>	<b>MOTION DESCRIPTION</b>	<b>GEOLOGICAL FEATURES</b>	<b>EXAMPLE LOCATIONS</b>
<b>Divergent</b>	CONSTRUCTIVE Plates pull apart, allowing lithospheric thinning and magma upwelling.	Mid-ocean ridges, rift valleys, fissure eruptions, and shallow earthquakes.	Mid-Atlantic Ridge, East African Rift.
<b>Convergent (Subduction)</b>	DESTRUCTIVE Denser oceanic plate sinks beneath a continental or younger oceanic plate.	Deep-sea trenches, volcanic island arcs, continental volcanic mountain ranges.	Mariana Trench, Andes Mountains, Cascade Range.
<b>Convergent (Collision)</b>	OROGENIC Two continental plates collide; neither subducts due to low density.	Folded mountain belts, high plateaus, intense seismic activity.	Himalayas, Alps, Appalachian Mountains.
<b>Transform</b>	CONSERVATIVE Plates slide horizontally past one another along a strike-slip fault.	Offset surface features (rivers, fences), linear valleys, frequent shallow earthquakes.	San Andreas Fault, North Anatolian Fault.