

Plate Boundaries	Key Characteristics	Consequences
<p>Collision</p> <p>Happens on land? Y</p> <p>Happens under water? N</p>	<p>Both plates are continental</p> <p>Both plates have the same density and are less dense than the mantle</p> <p>e.g. Indian Plate & Eurasian plate</p>	<p>The plates buckle up and create fold mountains.</p> <p>Earthquakes possible? Y - shallow</p> <p>Reason: plates pushing together causes pressure and plates crack into faults</p> <p>Volcanic activity possible? N Reason? No subduction</p>
<p>Destructive</p> <p>Happens on land? Y</p> <p>Happens under water? Y</p>	<p><i>Oceanic meets continental</i></p> <p>Dense oceanic plate forced beneath the continental plate Eg Pacific plate and Nazca</p> <p><i>Oceanic meets oceanic</i></p> <p>The denser of the two subducts, forming an underwater trench. Volcanoes can erupt under the sea and eventually make islands Pacific & North American (the bit with water on it!)</p>	<p>Continental plate can fold to make fold mountains &/or volcanoes on land & ocean trenches under water</p> <p>Earthquakes possible? Y - deep below the surface</p> <p>Reason: plates can stick; pressure builds up</p> <p>Volcanic activity possible? Y - explosive Reason? Subduction of the denser plate;</p>
<p>Constructive</p> <p>Happens on land? Y</p>	<p>[1] Oceanic pulls away from oceanic – melted mantle comes up through fissures (cracks); makes underwater ridges eg Eurasian plate moves away from North American plate</p>	<p>makes Rift Valleys & Highlands on land makes underwater ridges</p> <p>Earthquakes possible? N Reason: plates not locking</p>

<p>Happens under water? Y</p>	<p>[2] continental pulls away from continental. Plates expand and bulge due to the partially melted mantle making highlands. As plates stretch they fracture, making fallen blocks of lowland aka rift valleys</p> <p>Eg Arabian and African</p>	<p>Volcanic activity possible? Y Reason? melted mantle comes up to fill the gap</p>
<p>Conservative</p> <p>Happens on land? Y</p> <p>Happens under water? N</p>	<p>Two plates slide parallel, either in the same or opposite directions. Eg North American and Pacific Plate</p> <p>Plate neither made or destroyed</p>	<p>Earthquakes possible? Y Reason: plates lock together; friction builds; release = e/quake</p> <p>Volcanic activity possible? N Reason? No subduction</p>