

Types of Plate Boundaries and Events that Occur there

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1. Converging - plates are moving together
→ ← "colliding"

a) continental-continental collision

- causes mountain ranges, earthquakes, folding, faulting

ex Himalayas, Rockies
Mt Everest 9 km
still growing

b) oceanic-continental collision

- the ocean plate, made of denser basalt, will subduct or dive under the continental plate
→ deep quakes, chain of volcanos

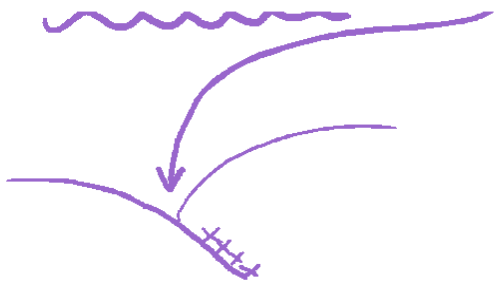
ex Juan de Fuca under N.A.

c) oceanic-oceanic collision

- one of the ocean plates will subduct under the other
→ deep quakes, chains of volc. (island arc)

ex Marianis Trench, 11 km deep
↑ Japan





2. Diverging



- usually it is ocean plates that break (because they are thinner) and move away from each other.

- ex - Stikine Volcanic Belt in NW BC
- Columbia flood basalt in WA
 - Mid-Atlantic Ridge

3. Sliding (Transform)



- two plates move past each other side-by-side, no vertical motion
- shallow earthquakes only

ex San Andreas Fault in CA