

Plate Boundaries

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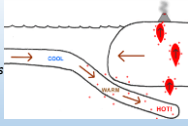
Content Label
 GRADES 12, PHYSICAL SCIENCE ASSISTANCE
 THROUGH EARLY GRADE 10, PHYSICS, GEOLOGY, AND SUPER SCIENCE

- I can name & explain the movements associated with Convergent plate boundaries
- I can name & explain the movements associated with Divergent plate boundaries
- I can name & explain the movements associated with Transform plate boundaries

Convergent Plate Boundaries

Description

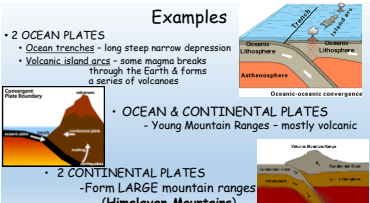
- Two plates **COME TOGETHER**
- Denser of the 2 plates sinks (**SUBDUCTION**)



• Heat and pressure causes local metamorphism

Examples

- 2 OCEAN PLATES
 - Ocean trenches - long steep narrow depression
 - Volcanic island arcs - some magma breaks through the Earth & forms a series of volcanoes
- OCEAN & CONTINENTAL PLATES
 - Young Mountain Ranges - mostly volcanic
- 2 CONTINENTAL PLATES
 - Form LARGE mountain ranges (Himalayan Mountains)

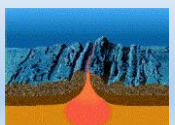



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Divergent Plate Boundaries

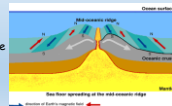
Description

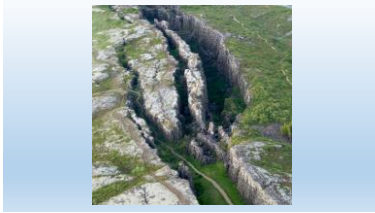
- TWO plates move apart & magma rises
- NEW CRUST forms



Examples

- Continental Plates
 - Continental rift valley
 - Typically 30km - 50 km wide
- Ocean Plates
 - Mid-ocean ridge - mountain range at the bottom of the ocean
 - Moves 2cm per year







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Transform Plate Boundaries

Description


- TWO plates collide while they **SLIDE PAST** each other
- Lots of potential energy builds up → kinetic energy is released as earthquakes



Two Plates Sliding Past Each Other
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Examples

- San Andreas Fault → in California moves 6cm a year
- Stream beds that were split


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