

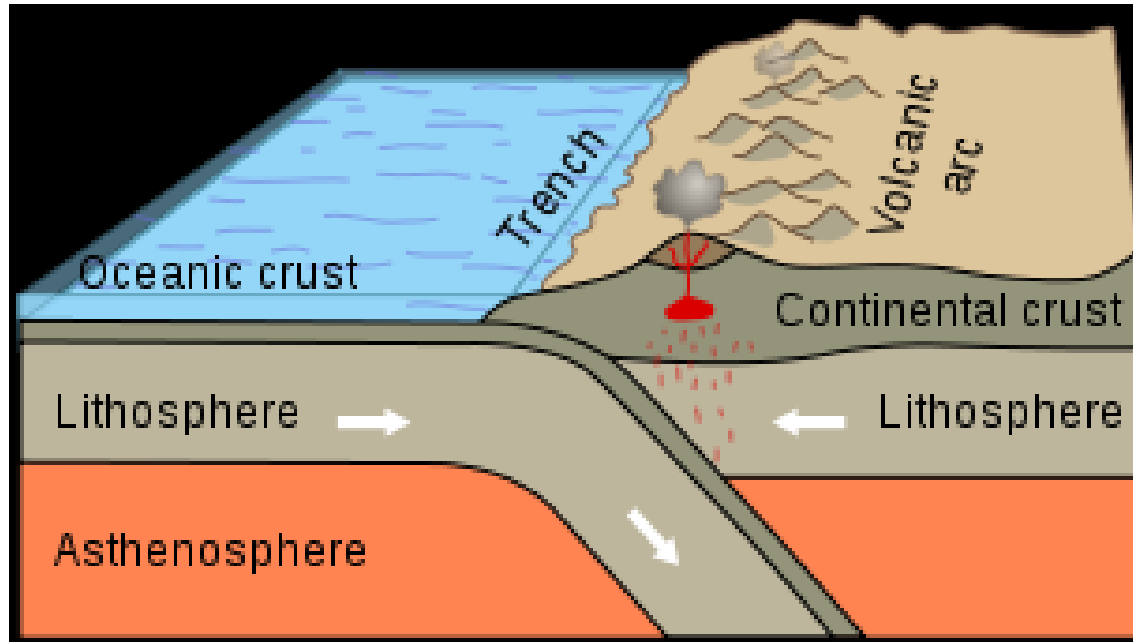
What happens at the battleground at plate boundaries?



Key Terms

- Fault:
- Continental drift:
- Subduction Zone:
- Convergent:
- Divergent:
- Transform:
- Continental Crust:
- Oceanic Crust:

Convergent: Oceanic & Continental

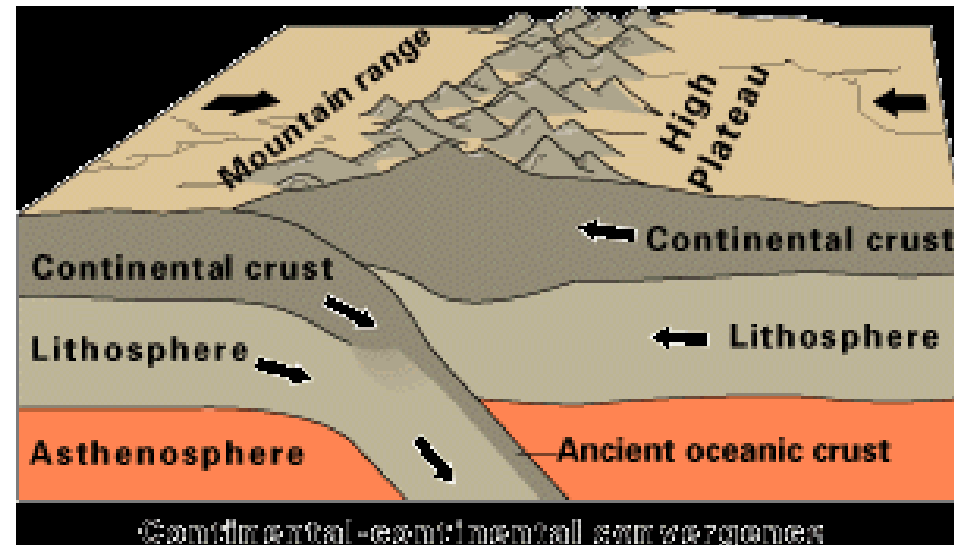


Convergent (Oceanic & Continental)

- Oceanic crust is denser than continental crust and so **subducts** (is forced to sink into the mantle)
- This is a **subduction zone**
- The sinking crust melts under friction & pressure...forms magma which creates volcanoes in the continental crust surface
- **E.g.** The Nazca plate in South America – forms the Andes & a line of volcanoes

Convergent (Two continental)

- If both plates are continental, then they are both too light to really subduct
- So, a collision occurs
- Forms large mountain chains e.g. the Himalaya



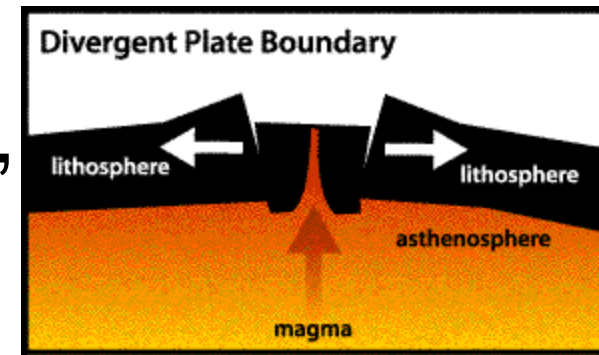
Divergent on land





Divergent (on land)

- A.K.A. 'constructive' boundary
- As plates diverge, this allows magma to the surface
- When crusts diverge on land, it forms a rift valley
- e.g. Mid-Atlantic rift in Iceland, East African Rift



Divergent under the ocean

- When plates diverge under the ocean, magma rises to the surface to create new land
- The **Mid-Atlantic Ridge** is the biggest area of divergence
- As magma rises it cools, forming ridges of mountains / volcanoes and new land
- This is part of the recycling of oceanic crust

Divergent under the ocean

- In Iceland, the Mid-Atlantic ridge is diverging and splitting the country apart



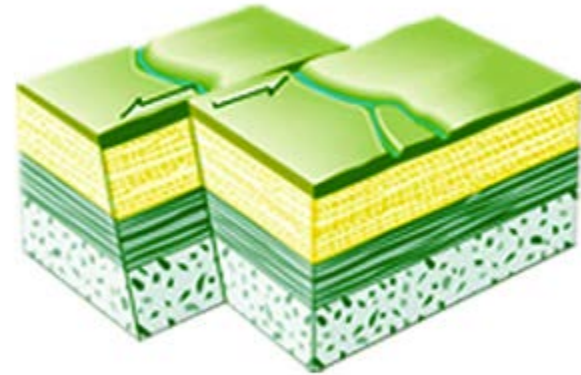
Iceland is growing every year!



Transform

- Where plates slide past each other
- No real surface features
- Creates a lot of earthquakes as friction builds up then one plate jumps forward
- E.g. San Andreas Fault, California, USA

Transform fault



Transform Fault

Hotspots

- Weak areas in the earth's crust that are far from plate boundaries that allow magma to punch through to the surface
- E.g. Hawaii