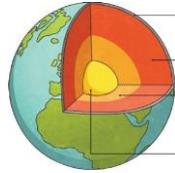


6.1 - Earthquakes and Volcanoes

Earthquakes and volcanoes are closely linked and are some of the most well-known types of hazard. Plate tectonics are driven by convection currents in the earth's interior. The plates are always moving and changing, creating volcanoes and earthquakes across the globe.

Volcanic hazards - Lava flows, ash clouds, ash falls, pyroclastic flows, dangerous gases, mudflows.

Earthquake hazards - Ground shaking, buildings collapsing, surface cracks, fires, infrastructure cut off, disease.



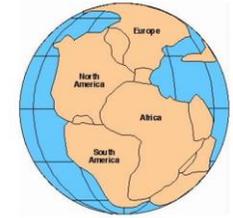
Japan earthquake and tsunami - Tohoku 2011
 - A very large earthquake 9.0 on the Richter scale. Huge damage, 20,000 deaths and nuclear power plants damaged.

Continental drift

What is continental drift?

1912 Alfred Wegener Hypothesized that-

- the continents are moving = Continental drift
- all continents once formed a supercontinent = Pangaea →



Keywords

Physical Geography, active, crater, dormant, earthquake, eruption, extinct volcano, lava, plate boundary, Richter Scale, tectonic plate, tsunami, volcano, continent, core, crust, fault, gas, magma, molten, pressure.

Where do volcanoes and earthquakes happen?



Structure of a volcano

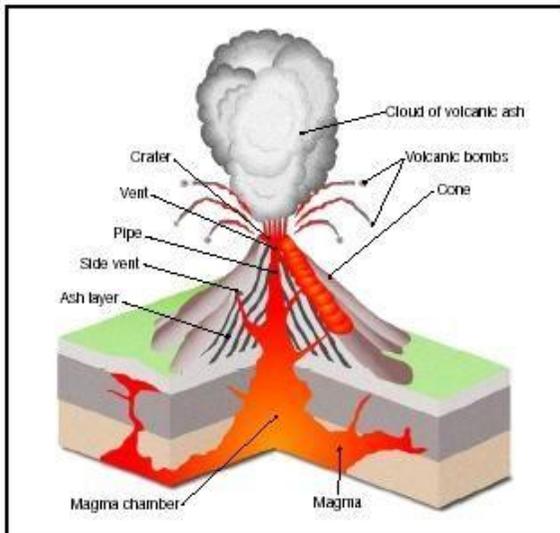
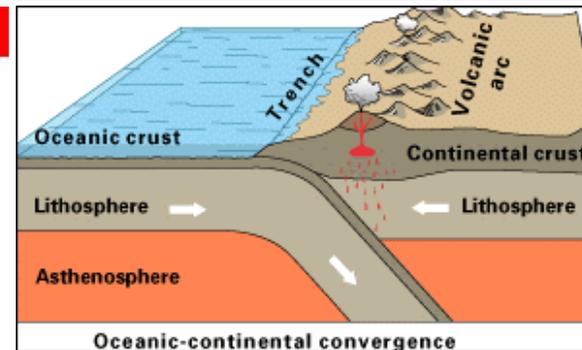
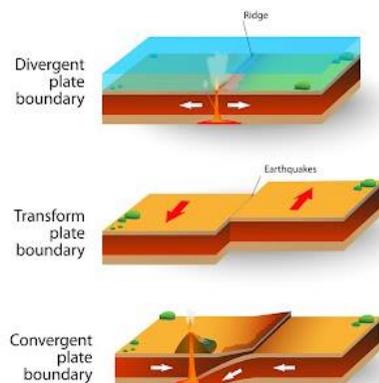


Plate boundaries

THREE TYPES OF PLATE BOUNDARY



Destructive plate boundaries - At this type of plate boundary, volcanoes are common and some of the strongest earthquakes occur. Oceanic plates are pushed below continental plates (subduction) and partial melting creates volcanoes.

Why do people live in tectonically active areas?

Fertile soils, geothermal energy, tourism, valuable minerals, little other choice, family reasons, people are willing to take the risks.