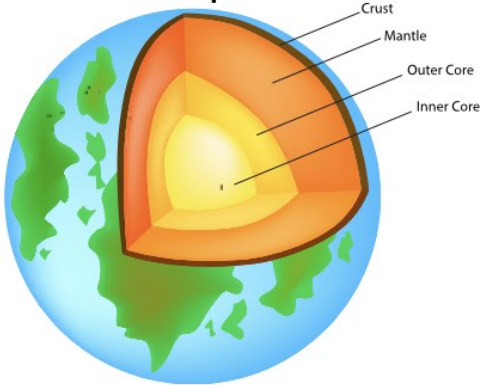




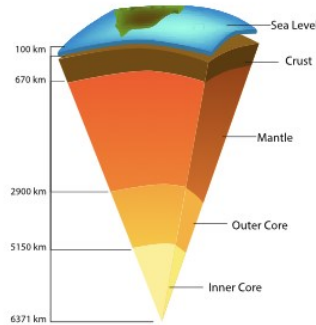
### structure of the earth

Layers of the earth



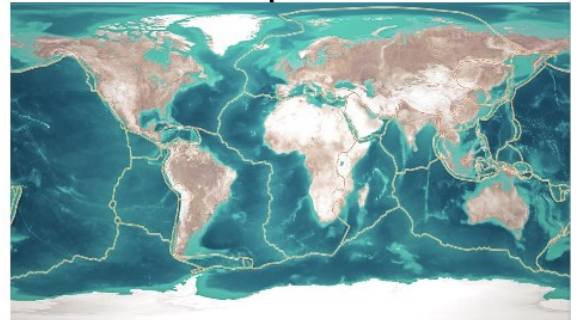
### tectonic

**Latin - building**  
(process that controls the structure of the Earth's crust)

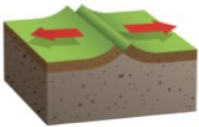


### tectonic plates

massive slabs of irregular shaped rock that continents and oceans sit on



tectonic plates separate, scrape or collide



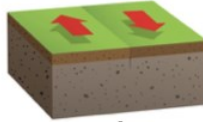
**pull apart**

volcanoes (few earthquakes)

**fissures**  
(long cracks in ground)

**magma** escapes  
(liquid rock from the Earth's crust)  
new rock crust is formed

Rift Valley in Africa or mid-ocean ridge in the Atlantic  
(moving 2.5 cm a year!)



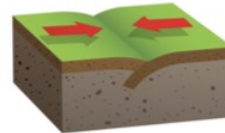
**scrape alongside**

volcanoes earthquakes

grind each other

no space for **magma** to rise

**San Andreas Fault**  
Los Angeles and San Francisco



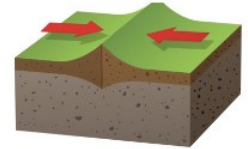
**collide (bend and slide)**

volcanoes earthquakes

**ocean plate** meets another **ocean plate** or **continental plate**

one will **bend and slide** under the other

volcanic mountain ranges  
**Andes** or island chains like **Japan**



**collide (buckle)**

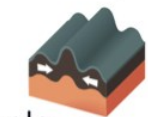
volcanoes earthquakes

two **continental plates** meet

towering **fold** mountain ranges

**Himalayas**  
Mount Everest

### mountains



**fold** mountain



**dome** mountain

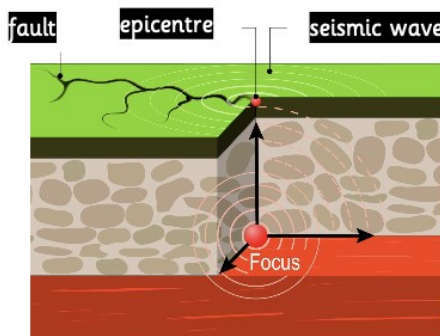


**fault-block** mountain



**volcanic** mountain

### earthquakes



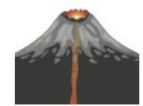
Shock waves are produced when **tectonic plates** pull apart, scrape or collide

### volcanoes

Latin: *Vulcanus* = god of fire



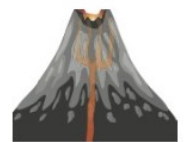
Fissure volcano



Shield volcano



Stratovolcano



Caldera volcano