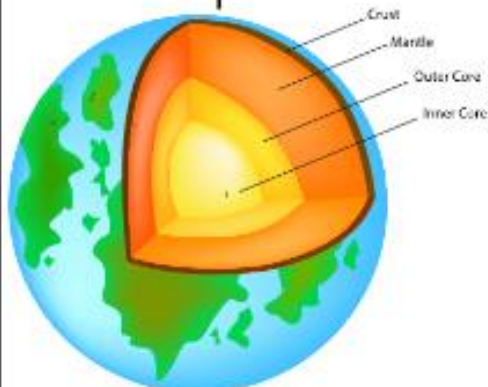




### structure of the earth

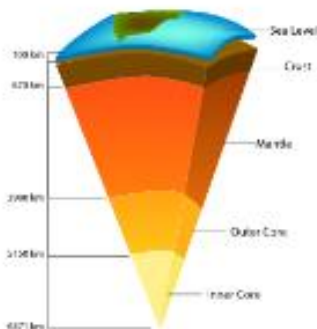
Layers of the earth



### tectonics

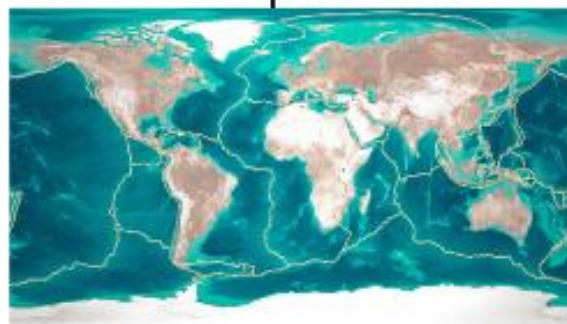
Latin - building

(process that controls the structure of the Earth's crust)



### tectonic plates

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



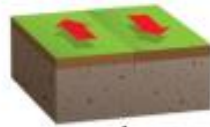
↔ ↔ →|←

tectonic plates separate, scrape or collide



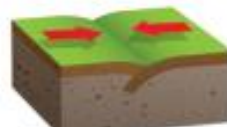
pull apart

volcanoes (few earthquakes)



scrape alongside

volcanoes earthquakes



collide (bend and slide)

volcanoes earthquakes



collide (buckle)

volcanoes 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!)

grind each other

no space for magma to rise

San Andreas Fault Los Angeles and San Francisco

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

two continental plates meet

towering fold mountain ranges

Himalayas Mount Everest

### mountains



fold mountain



dome mountain

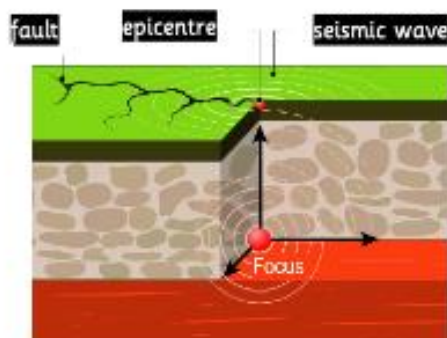


fault-block mountain



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