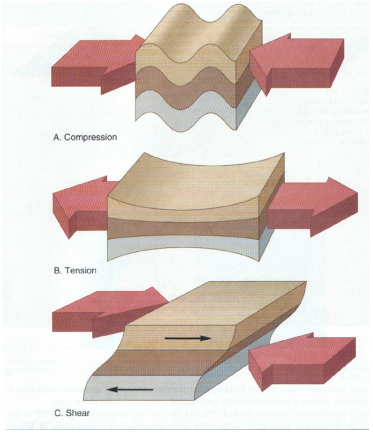
Types of Geologic Stress

Compression

Tension

Shearing



Faulting vs. Folding

Factors that will determine if a rock will fault or fold

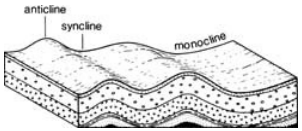
Temperature

Confining Pressure

Rock Type

Time

Folding



Anitcline

Syncline

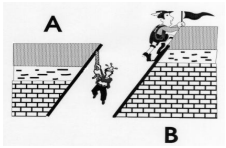
Monocline

Faulting

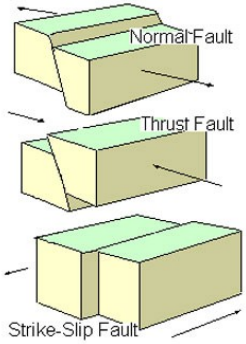
Fracture

Hanging Wall (A)

Foot Wall (B)



Types of Faults



Normal

Reverse

- Thrust

Strike Slip

PLATE TECTONICS VOCABULARY

Continental drift

Pangaea

Plate tectonics

Plate

Divergent boundary

Convergent boundary

Transform boundary

Oceanic ridge

Rift valley

Seafloor spreading

Subduction zone

Trench

Volcanic island arc

Continental volcanic arc

Paleomagnetism

Hot spot

Convective flow

Mantle plume

Lithosphere

Asthenosphere

Deformation

Stress

Strain

Anticline

Syncline

Monocline

Tension

Compression

Shearing

Normal Fault

Reverse Fault

Thrust Fault

Strike-Slip Fault

Orogenesis

Folded Mts.

Fault-block Mts.

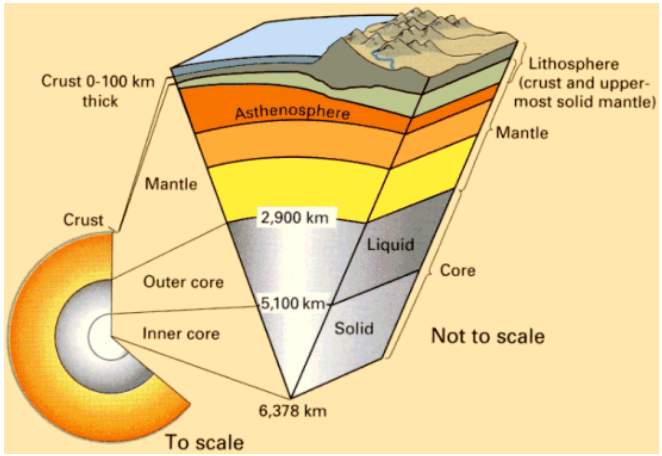
Graben

Horst

Terrane

Isostasy

Earth's Interior



Inner Core

Outer Core

Mantle

Mohorovocic Discontinuity (Moho)

Crust

Unique Areas of the Interior

Asthenosphere

Lithosphere

Continental Drift

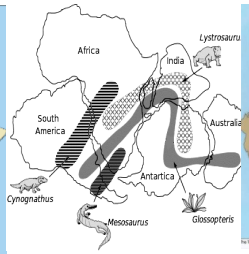
Alfred Wegener -

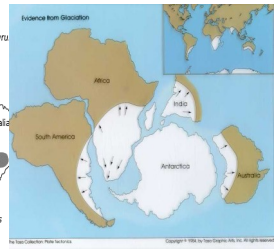
Pangaea -

Panthalassa -

Theory of Continental Drift -

Evidence For Continental Drift





Geographic Fit of Continents (#1)

Fossil Evidence (#2)

- *Mesosaurus*
- *Glossopteris*

Glacial Scarring (#3)

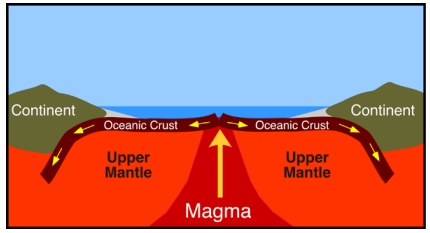
Mountain Ranges (#4)

Seafloor Spreading

Mid-ocean ridge -

Subduction -

Trench -



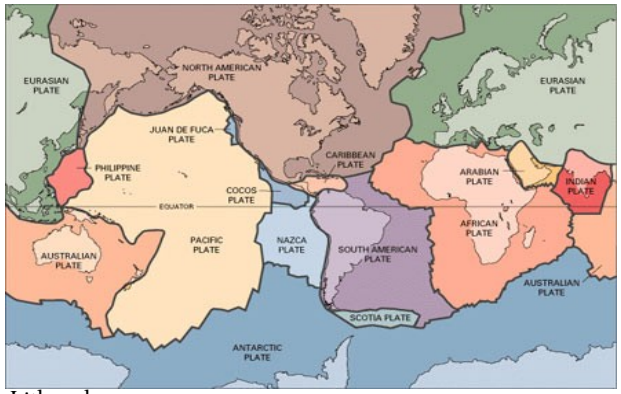
<u>Evidence</u>

Rock Age -

Paleomagnetism -

Convection Currents -

Plate Boundaries



Lithosphere

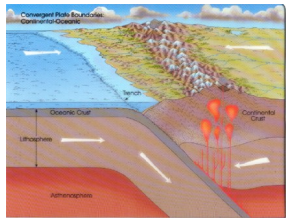
Asthenosphere

TYPES OF MOUNTAINS

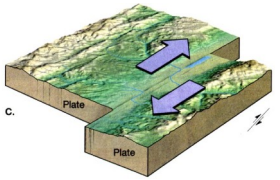
Folded: Dome:

Fault-Block: Volcanic:

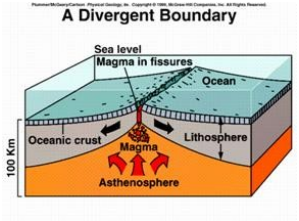
Name & Describe Each Boundary



Example:

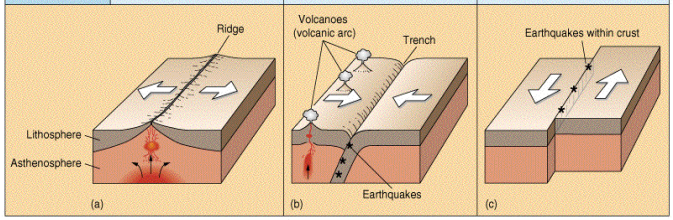


Example:



Example:

Type of Margin	Divergent	Convergent	Transform
Motion	Spreading	Subduction	Lateral sliding
Effect	Constructive (oceanic lithosphere created)	Destructive (oceanic lithosphere destroyed)	Conservative (lithosphere neither created or destroyed)
Topography	Ridge/Rift	Trench	No major effect
Volcanic activity?	Yes	Yes	No



Describe 3 Types of Convergent Boundaries

Oceanic-Continental:

Oceanic-Oceanic:

Continental-Continental: