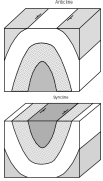# MOUNTAINS NOTES

Name: _____

1. What is a Mountain?   A large mass of rock or landform that rises a great distance above its base **(about _____ meters)**

2. Where do mountains form? Generally, along _____ **plate boundaries (Collision)**

3. How do mountains form? Mountains form from _____ **that have been permanently** _____ **under** _____.

Tallest Mountain in the U.S.? → Mt. McKinley, Alaska with an elevation of _____ feet or 6194 meters
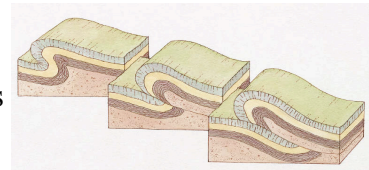
The 3 Types of mountains:

1) Folded Mountains   (CONVERGENT BOUNDARIES) Ex: _____mountains
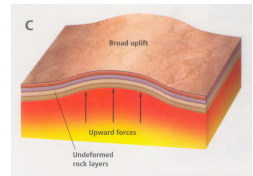**Formed by the**_____ **of rock layers during plate** _____.

_____: An **upward** fold in the rocks

_____: A **downward** fold in the rocks

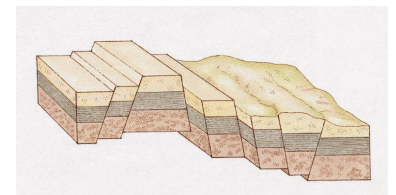**2) Dome Mountain** Ex.:_____ mountains

A circular folded mountain, Formed by _____.

3) Fault-Block Mountains Ex:_____ mountains
Movement can occur in several directions in Fault-Block Mountains

Formed when normal _____ _____ a block of rock

Label the different
Types of Mountains
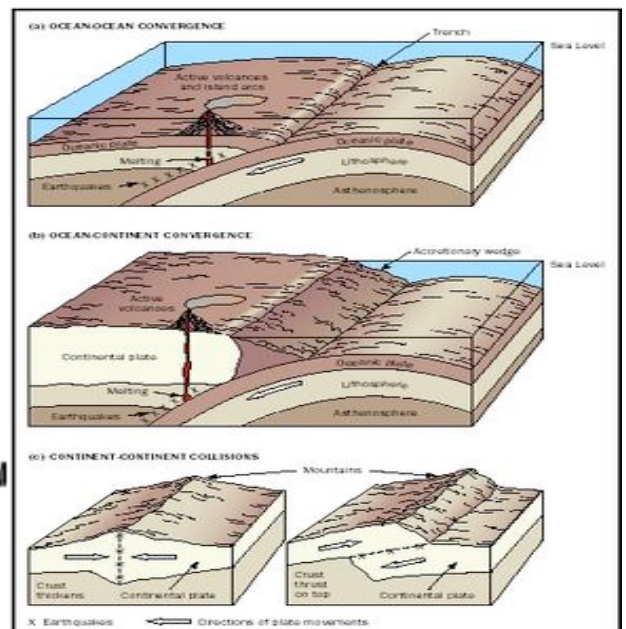
Upwarped mountains

Crustal arching

Volcanic mountains

Graben

Horst

Fault-block mountains

Folded (complex) mountains

compressional forces

(a) OCEAN-OCEAN CONVERGENCE

(b) OCEAN-CONTINENT CONVERGENCE

(c) CONTINENT-CONTINENT COLLISIONS

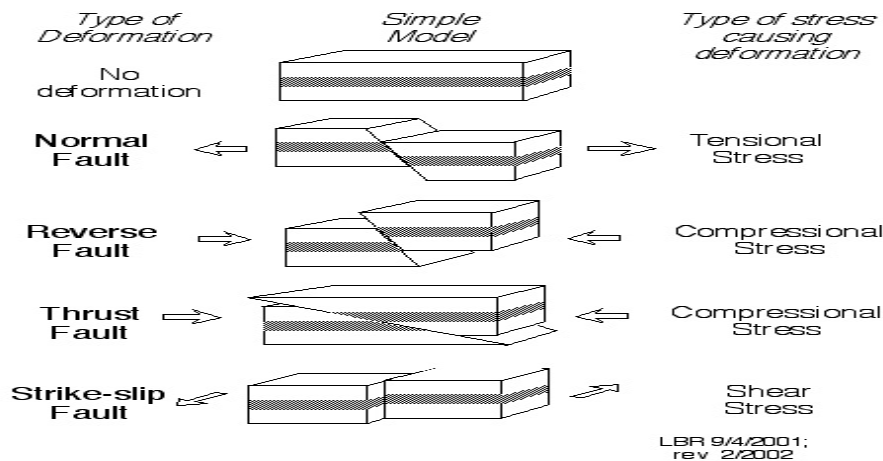## _Faults are classified by how the rock moves on either side of the fault plane:_

→A _____ is formed when occurs when the hanging wall moves up (Convergent Boundaries push rocks up and over)

→ A _____ occurs when the hanging wall moves down (Divergent Boundaries release tension and rocks slide down)

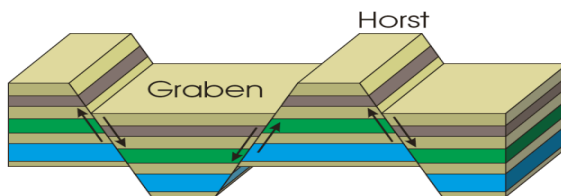→A **thrust fault** is a reverse fault in which the fault plane dips 45 degrees or less from the horizontal.

→ A _____ _____ Fault the type of fault occurs when rock on opposite sides of a fault plane move **horizontally** past each other? **(Like in an Earthquake!)**

Simple faults and why they form

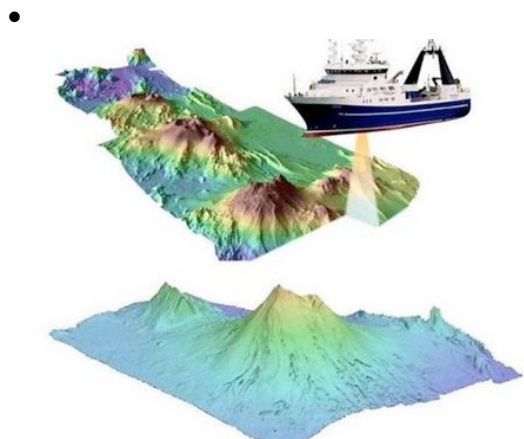| Type of Deformation	Simple Model	Type of stress causing deformation
No deformation		
Normal Fault		Tensional Stress
Reverse Fault		Compressional Stress
Thrust Fault		Compressional Stress
Strike-slip Fault		Shear Stress

LBR 9/4/2001;
rev 2/2002

How do Horsts and Grabens differ?

_____ are large blocks of crust that have been _____ between faults
_____ are large blocks of crust that have _____ between faults

Horst

Graben

Underwater mountains are called **seamounts** until they reach the water's surface and become **islands**.
•Ships use _____ to make 3-D images of underwater features like mountains.
•

SOL Review:
What do **circles** on a **topographic map** indicate?

_____