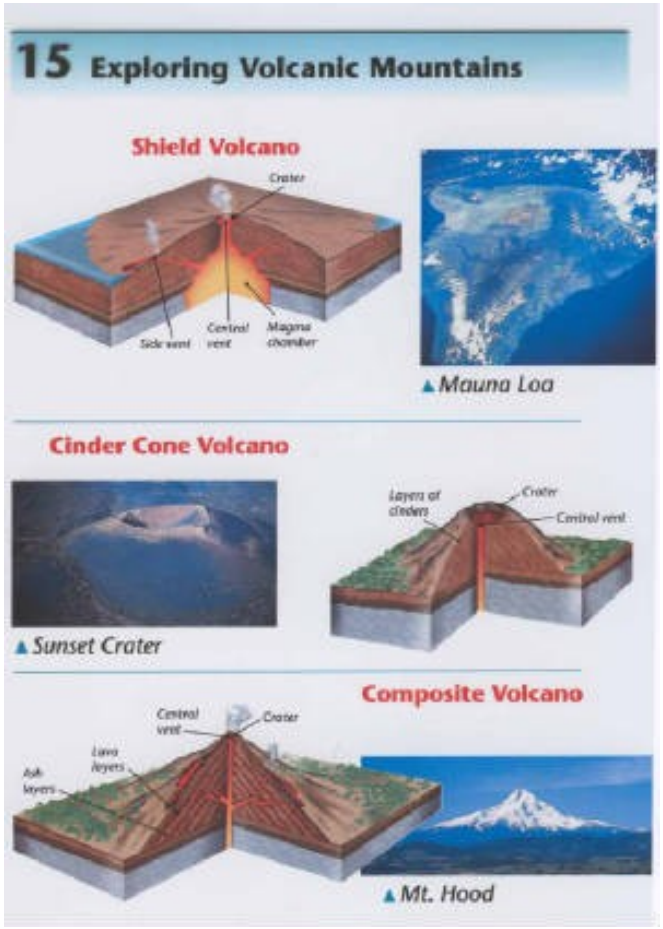
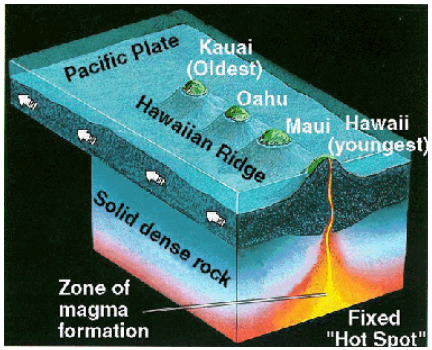


Be able to explain the formation of each of the above types of volcanoes and where they can be found.

What is the diagram below showing?

Where is an example of this on continental crust?



Words to Know

Aftershock
Earthquake
Elastic rebound theory
Epicenter
Focus
Intensity
Magnitude
Mercalli scale
Microquake
Moho
P wave
Pacific ring of fire
Richter scale
S wave
San Andreas fault
Seismic gap
Seismograph
Shadow zone
Surface wave
Tsunami
Aa
Caldera
Cinder Cone Volcano
Composite Cone Volcano
Crater
Felsic Lava (Silica-based)
Hot Spot
Lapilli (cinders)
Lava
Mafic Lava (Basalitic)
Magma
Pahoehoe
Pillow Lava
Shield Volcano
Stratovolcano
Vent
Volcanic Ash
Volcanic Block
Volcanic Bomb
Volcanic Dust
Volcano

How about that Mastery??

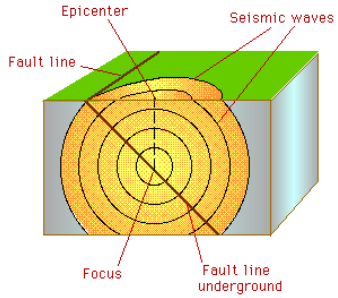
Earthquakes and Volcanoes

Fault =

Focus =

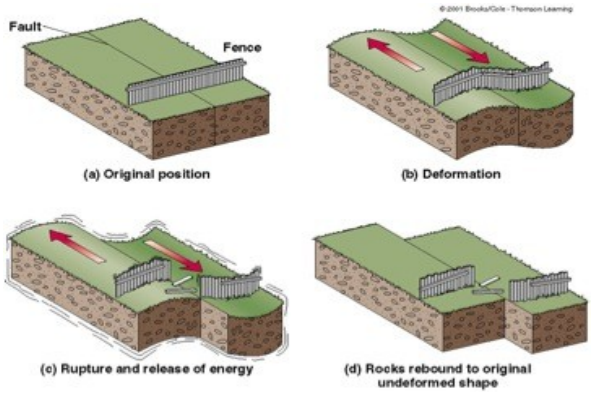
Epicenter =

Seismic Wave =

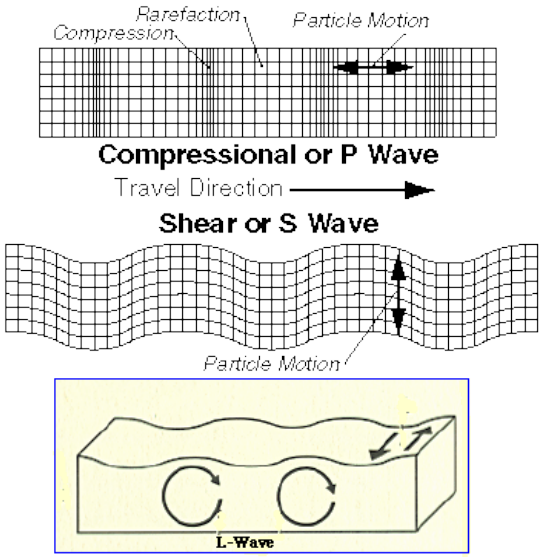


Although earthquakes can occur along any type of plate boundary and fault, the MOST likely locations for quakes are found along _____ plate boundaries and _____ faults with _____ stress. The most seismically active region on the planet is the _____ belt, a.k.a. "_____."

Elastic Rebound Theory



Types of Seismic Waves

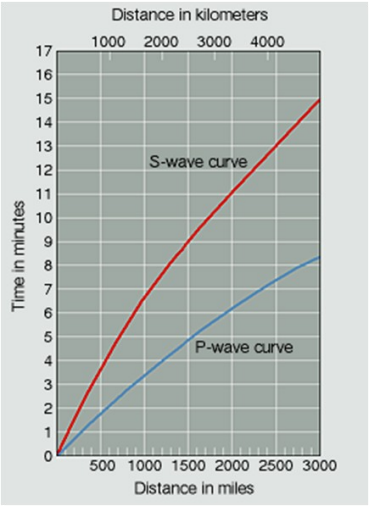


DESCRIBE EACH:

P Wave:

S Wave:

L Wave:



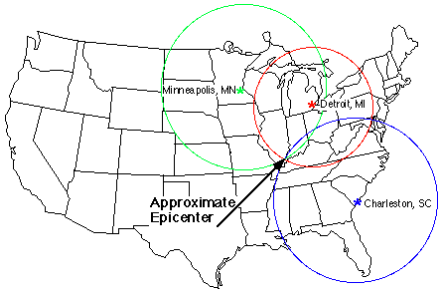
IF you are 1500 miles away:

How long after the EQ does the P wave appear?

How long after the EQ does the S wave appear?

If the time between P and S waves is 4 minutes, how far away from the epicenter are you?

Explain (in detail) what this diagram is showing.



Measuring Seismic Activity

How are these 2 scales alike?

List at least three ways that they are different.

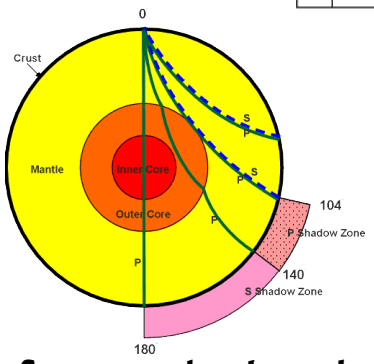
1.

2.

3.

What is the scale used today by most scientists?

	Modified Mercalli Scale	Richter Magnitude Scale
I	Detected only by sensitive instruments	1.5
II	Felt by few persons at best, especially on upper floors; delicately suspended objects may swing	2
III	Felt noticeably indoors, but not always recognized as an earthquake; standing autos rock slightly, vibrations like a passing truck	2.5
IV	Felt indoors by many; outdoors by few, at night some awaken; dishes, windows, doors disturbed; standing autos rock noticeably	3
V	Felt by most people; some breakage of dishes, windows, and plaster; disturbance of tall objects	3.5
VI	Felt by all, many frightened and run outdoors; falling plaster and chimneys, damage small	4
VII	Everybody runs outdoors; damage to buildings varies depending on quality of construction; noticed by drivers of autos	4.5
VIII	Panel walls thrown out of frames, walls, monuments, chimneys fall; sand and mud ejected; drivers of autos disturbed	5
IX	Buildings shifted off foundations, cracked, thrown out of plumb; ground cracked; underground pipes broken	5.5
X	Most masonry and frame structures destroyed; ground cracked, rails bent, landslides	6
XI	Few structures remain standing; bridges destroyed, fissures in ground, pipes broken, landslides, rail bent	6.5
XII	Damage total; waves seen on ground surface, lines of sight and level distorted, objects thrown up into air	7
		7.5
		8

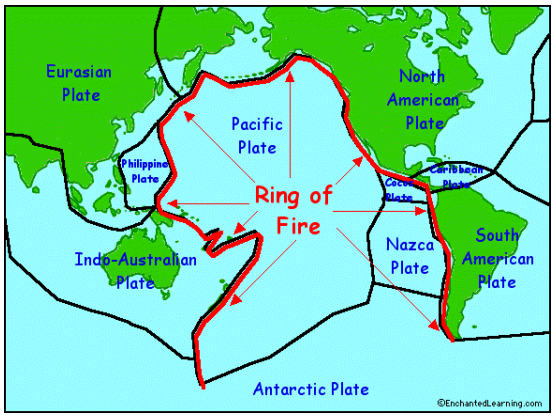


What is a shadow zone?

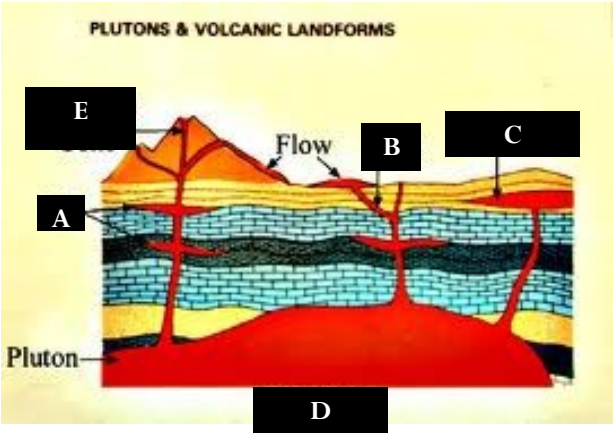
How is it formed?

How are earthquakes and volcanoes related?

Earthquake Zones



Name the major Earthquake & Volcano Zones:



Match up the following with the diagram above

_____ Batholith

_____ Dike

_____ Laccolith

_____ Sill

_____ Volcanic Neck

What is the difference between a volcanic extrusion and a volcanic intrusion?