Warm Up 2: Geosphere
9-24-18

LT I can explain the difference between relative and absolute dating. I can explain what moves tectonic plates.

Q1. What theory is it when the continents were all together and have slowly moved apart?

Q2. What causes Oceanic Ridges?

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A1) Pangea

Q2. What causes Oceanic Ridges?

A2) Volcanism: the distribution of magma surfacing and depositing on the present surface.

Study Guide Questions

-ask Neighbor

1 Min

-ask LeMay

? Min

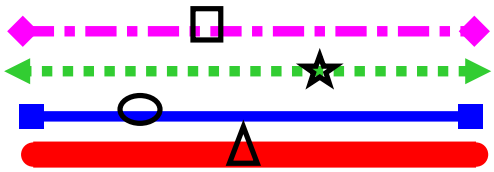
Relative Vs. Absolute Dating

Relative: tell us if something is older or younger than something else.

We can not know exactly how old it is.

What is oldest layer

What is newest shape



Absolute: We use RADIOACTIVE DECAY to determine age of something

Layers of the Earth

The Earth has “4” Layers

1. Crust (very thin and solid)
2. Mantle (Fluid)
   Has Convection Currents
   Hot magma from core rises, and then cools and sinks – creates circular motion that drives the movement of continental plates
3. Outer Core (sometimes called lower mantle)
   Made of liquid, hot magma!
4. Inner Core (Solid)

Layers of the Earth

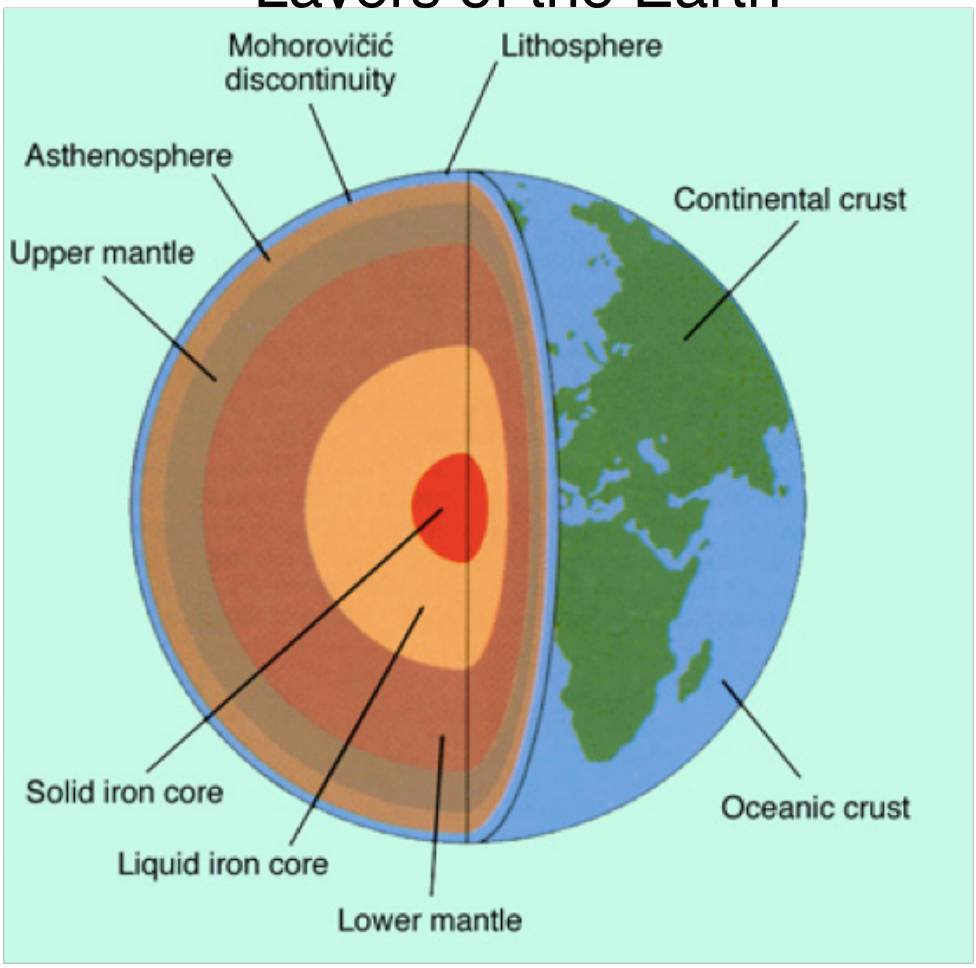


Plate Tectonics

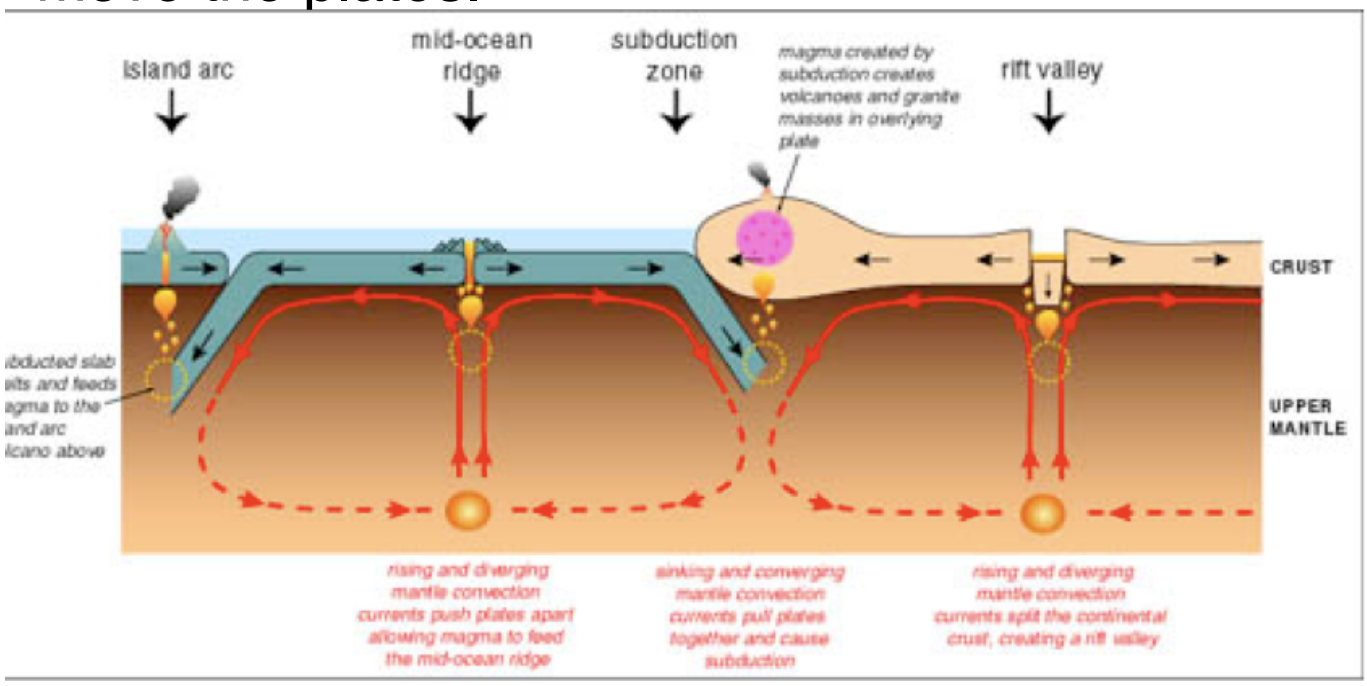
Theory of plate tectonics.

The Earth's crust is broken into big slabs called plates.

Tectonic plates interact at places called plate boundaries.

Convection Currents

The currents are created by high temperatures causing the liquid to rise and the cooler liquid to sink. This causes a cycle with currents that move the plates.



Movement of Plate

Divergent Boundary.

Places where 2 plates are moving apart

Typically form ocean ridges

When continental crust begins to separate it forms a long, narrow depression called a rift valley

Convergent boundary.

Where 2 plates are moving toward each other

When one of the two plates is being pushed underneath another it is called subduction. This can form Mountain Ranges

Transform boundary.

Where 2 plates slide past each other

The sliding can cause friction and when it moves an earthquake occurs.

FYI The Juan de Fuca plate off the coast of Oregon is a convergent boundary.

Vocab 1-3

1) Divergent Boundary:

ex) 

2) Convergent Boundary

ex)

3) Transform Boundary.

ex)

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Q3. What are the four layers of the earth?

Q4. How do the Tectonic Plates move?

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Q3. What are the four layers of the earth?
A3 Crust, Mantel, Outer Core, Inner Core

Q4. How do the Tectonic Plates move?
A4 Convection Currents