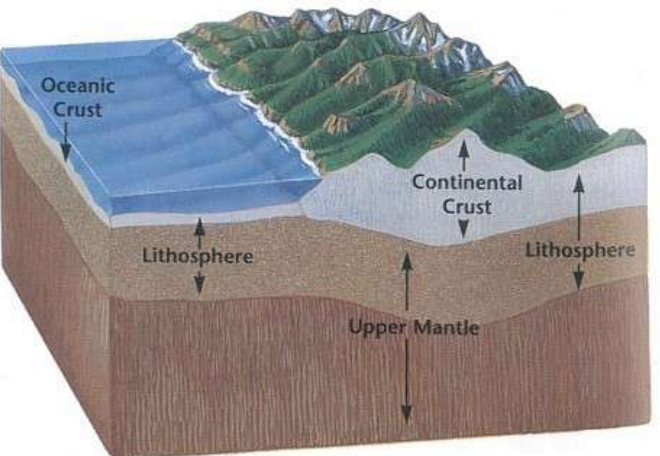
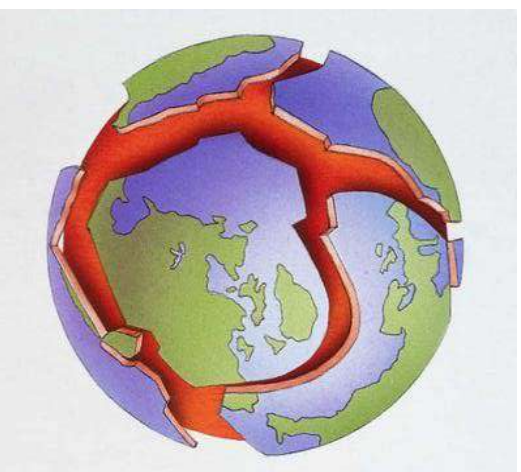


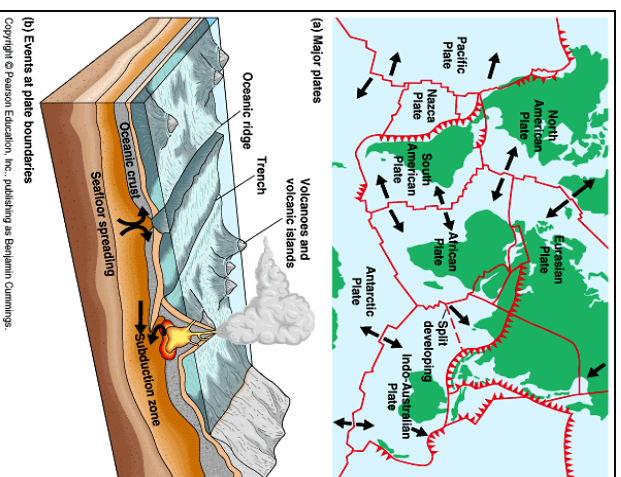
Asthenosphere



Lithosphere



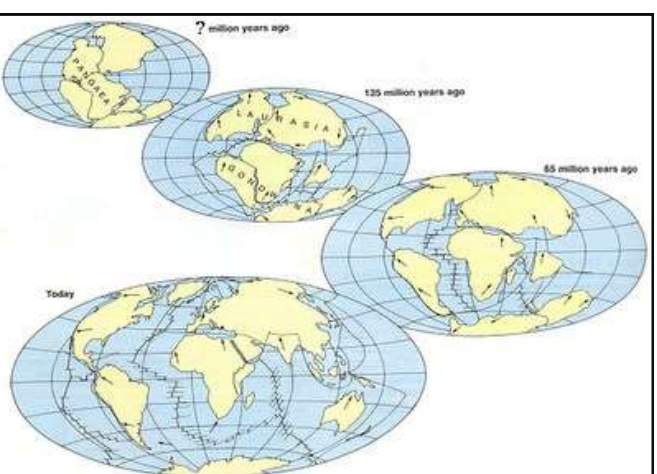
Lithospheric Plates



Theory of Plate Tectonics



Volcano



Continental Drift

Plate Tectonics

What is it? _____

What causes or caused it? _____

List three words you have already learned that relate to this term:

Other important facts: _____

What are they? _____

What causes or caused them? _____

List three words you have already learned that relate to this term:

Other important facts: _____

What is it? _____

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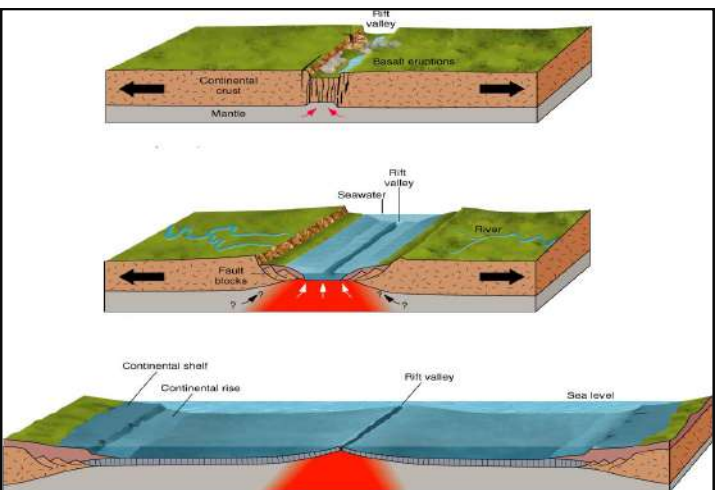
Other important facts: _____

What is it? _____

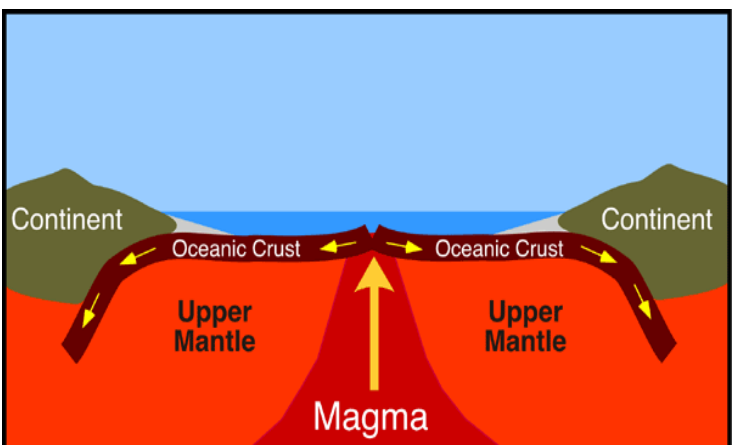
What causes or caused it? _____

List three words you have already learned that relate to this term:

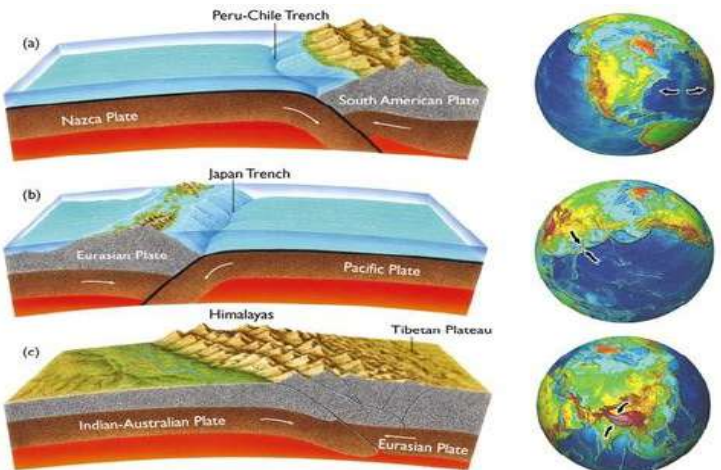
Other important facts? _____



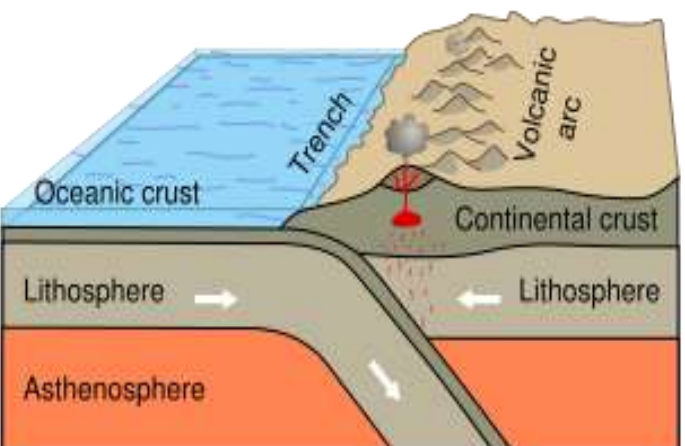
Divergent Plate Boundary



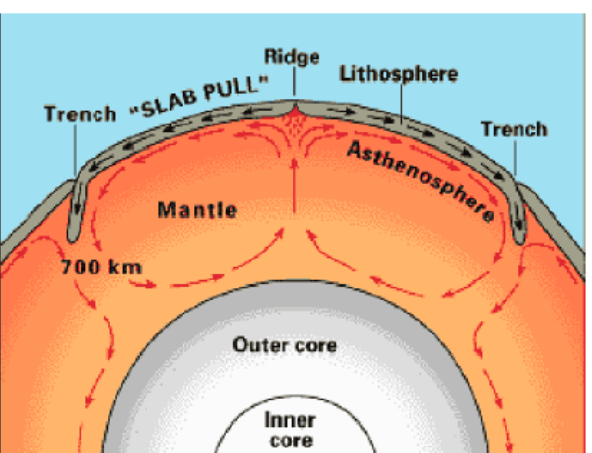
Seafloor Spreading



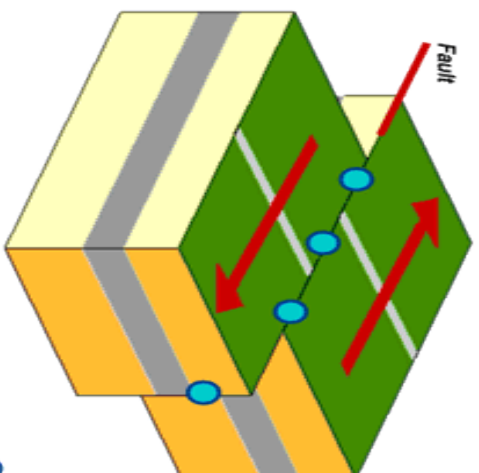
Convergent Plate Boundary



Subduction Zone



Convection Currents



Transform Plate Boundary



What is it? _____

What causes or caused it? _____

List three words you have already learned that relate to this term:

Other important facts: _____

What is it? _____

What causes or caused it? _____

List three words you have already learned that relate to this term:

Other important facts: _____

What is it? _____

What causes or caused them? _____

List three words you have already learned that relate to this term:

Other important facts? _____

What is it? _____

What causes or caused it? . _____

List three words you have already learned that relate to this term:

Other important facts: _____

What is it? _____

What causes or caused it? _____

List three words you have already learned that relate to this term:

Other important facts: _____

What are they? _____

What causes or caused them? _____

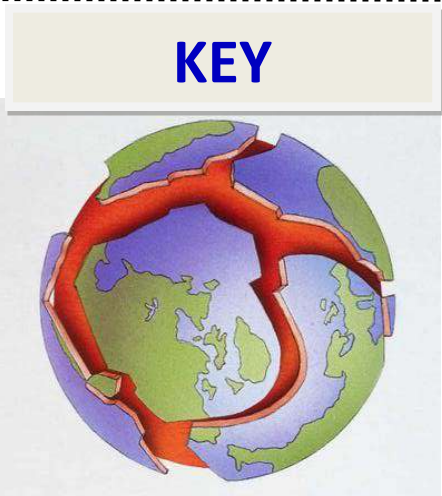
List three words you have already learned that relate to this term:

Other important facts? _____



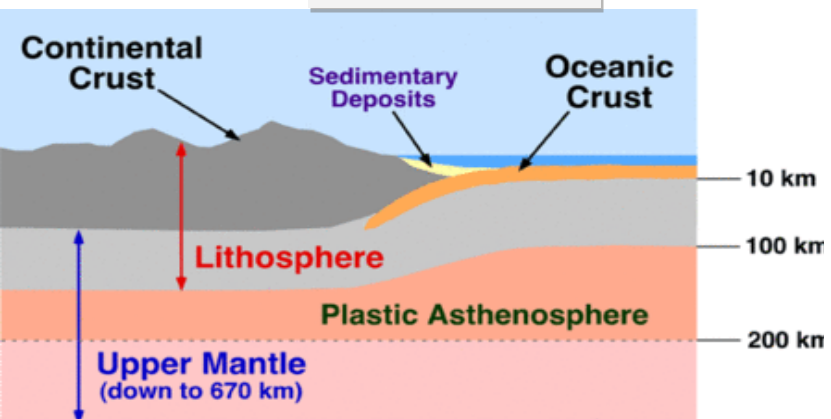
KEY

Volcano



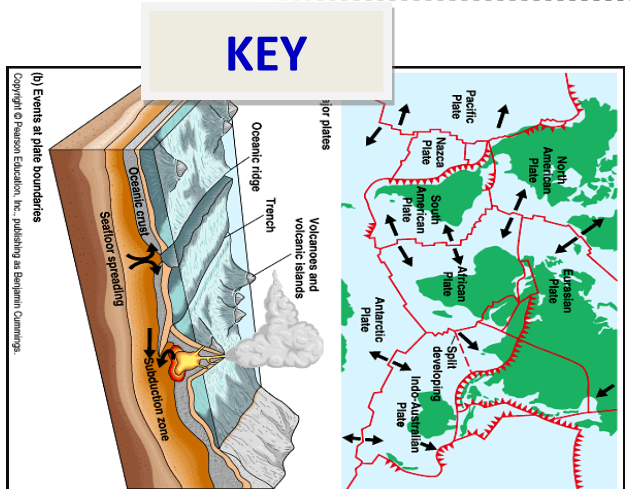
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Lithospheric Plates



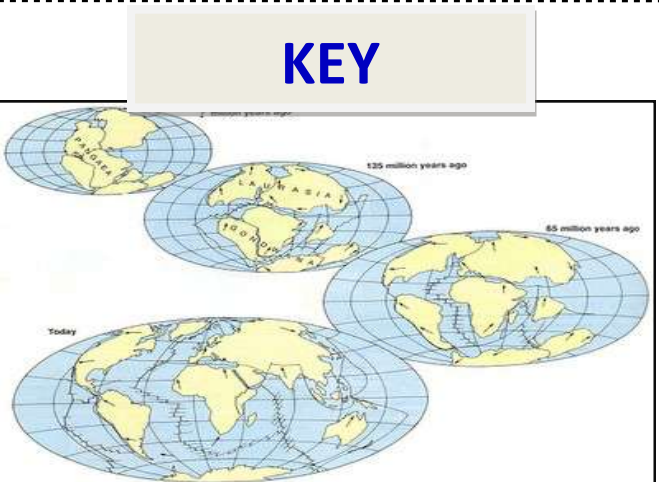
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Asthenosphere



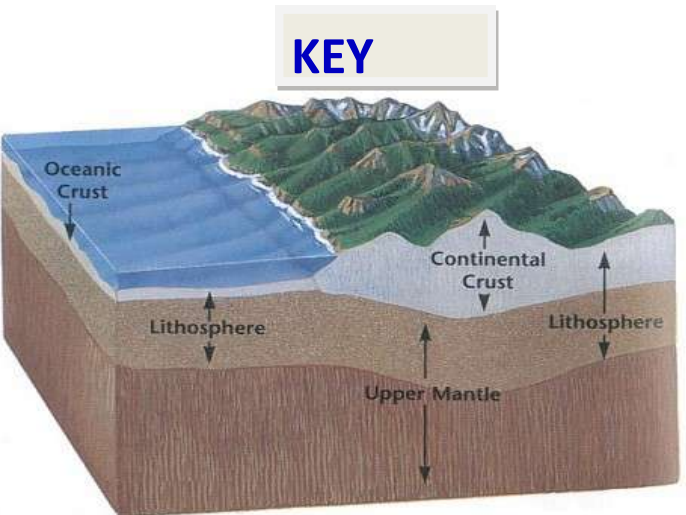
KEY

Theory of Plate Tectonics



KEY

Continental Drift



KEY

Lithosphere

Answers:

What is it? This is the middle section of the Mantle. It is denser than the lithosphere and hotter.

What causes or caused it? Density caused the Mantle to form sections. Heat caused the Asthenosphere to move with plasticity. _____

List three words you have already learned that relate to this term: Plasticity, Convection Currents, Density, Solid Rock

Other important facts: _____

What are they? These are the sections of broken lithosphere that float on the asthenosphere.

What causes or caused them? Because of its plasticity, the asthenosphere is constantly moving. The movement is in the form of convection currents. This causes the lithosphere to pull apart and crash together.

List three words you have already learned that relate to this term: Boundaries, Convergent, Divergent, Transform, Subduction

Other important facts: Shape and size of lithospheric plates is constantly changing.

What is it? A volcano is a mountain formed from lava that has crystallized or solidified, and ash.

What causes or caused it? A volcano is formed when the magma in the magma chamber is heated until it pushes up and out of the surface of the Earth. The magma is called lava at this point.

List three words you have already learned that relate to this term: Lava, Explosion, Lava Flow, Ring of Fire, Seismic Wave, Ash, Destruction

Other important facts? Most of the volcanoes in the world are located around the Ring of Fire, or the Pacific Plate

What is it? The lithosphere is the crust and the rigid upper mantle together. This is the rigid surface of the Earth on which we live.

What causes or caused it? The lithosphere is the least dense layer of the Earth. It floats on all the other layers.

List three words you have already learned that relate to these terms: Rigid, Plates, Oceanic Crust, Continental Crust, Upper Mantle.

Other important facts: Thinnest of all layers of the Earth.

What is it? The theory of plate tectonics is a theory that explains the movements of the Earth's surface which caused all land formations. "Plate" = Large slab of rock. "Tectonics" = To Build

What causes or caused it? that the Earth's lithosphere is made up individual plates that are broken down into over a dozen large and small pieces of solid rock. These plates ride on top of the Earth's more fluid middle mantle, creating different types of plate boundaries that have shaped the Earth's landscape over millions of years.

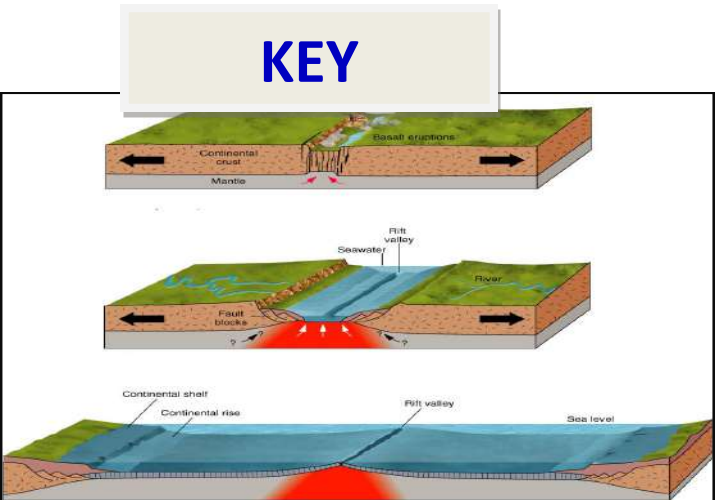
List three words you have already learned that relate to this term: Plasticity, Lithosphere, Asthenosphere, Plates, Boundaries, Volcanoes, Mountains, Trench, Mid-Ocean Ridge, Rift Valley,....

What is it? The Theory of Continental Drift, no longer used, refers to the fact that continents are not stationary, but move across the Earth's surface. This led to the Theory of Plate Tectonics.

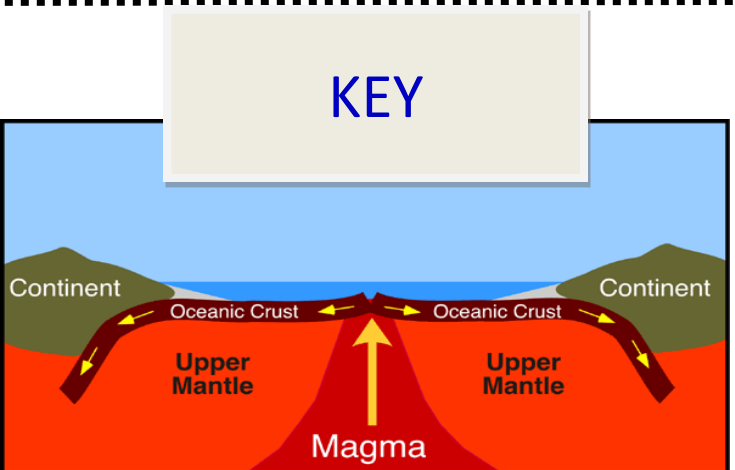
What causes or caused it? It was thought that Sea-Floor Spreading was the cause of the separation of Pangaea.

List three words you have already learned that relate to this term: Pangaea, Supercontinent, Sea-floor Spreading

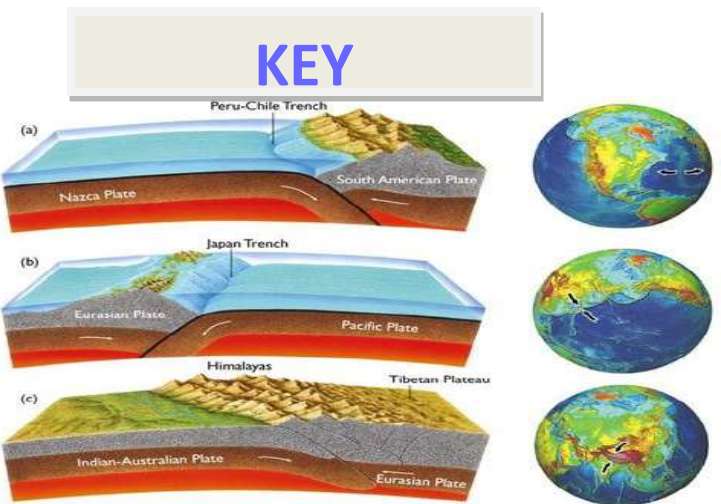
Other important facts? Disproven



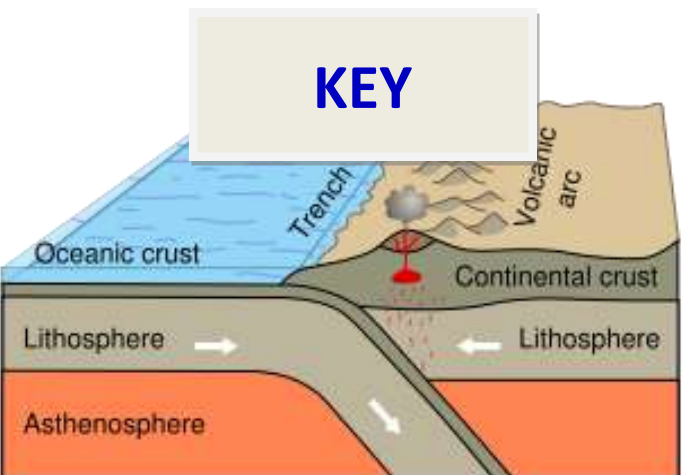
Divergent Plate Boundary



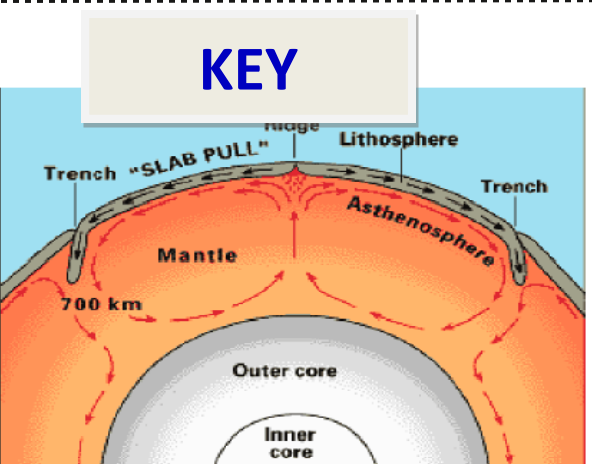
Seafloor Spreading



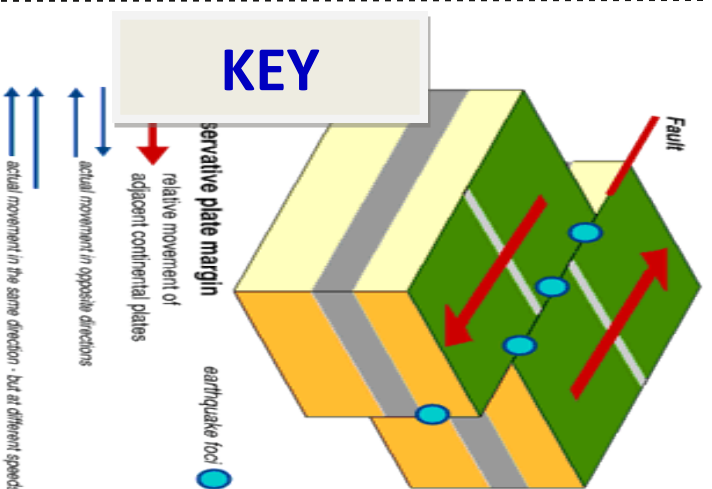
Convergent Plate Boundary



Subduction Zone



Convection Currents



Transform Plate Boundary

What is it? A divergent plate boundary is a location where two lithospheric plates are moving **away from each other**.

What causes or caused it? The two plates are floating on top of a convection current in the asthenosphere where the hot mantle material is flowing upward and then outward.

List three words you have already learned that relate to this term: Mid-ocean ridge, sea-floor spreading, rift valley, lava flow, shallow earthquakes

Other important facts: Causes plates to get larger, life forms which require no oxygen or sunlight are found along mid-ocean ridges.

What is it? A convergent plate boundary occurs when two plates collide or run into each other directly. This causes large changes in the surface of the earth (like when two cars run directly into each other). One plate is often pulled under another plate.

What causes or caused it? This occurs when two convection currents, in the asthenosphere, are both pushing into each other and sinking due to cooling.

List three words you have already learned that relate to this term: Earthquakes, Mountains, Bent and folded rock layers, Metamorphic

Other important facts: Mountains will always be a result of convergent boundaries. The mountains will get taller and taller as the two plates continue to push together.

What is it? Sea-floor spreading was the early explanation for Continental Drift. Evidence indicated that the Atlantic Ocean was getting larger.

What causes or caused it? This is actually the result of a Divergent Plate Boundary.

List three words you have already learned that relate to this term: Divergence, Continental Drift, Pangaea, ...

Other important facts: This is actually a mid-ocean ridge, which is caused by diverging plates.

What is it? Subduction Zones are also called Convergent Subduction boundaries. One plate is pushed down under another plate and into the asthenosphere.

What causes or caused it? Convergent Subduction Boundaries usually occur when one plate is less dense than the other plate, or when one plate is pushed with less force than the other plate.

List three words you have already learned that relate to this term: Volcano, Mountain, trench, earthquakes, danger, tsunami...

Other important facts: Convergent Subduction Boundaries surround most of the Pacific Plate.

What is it? A transform plate boundary occurs where two plates slide past each other. Because the plates are rigid, this causes very powerful earthquakes.

What causes or caused them? The convection currents that are moving each plate are not directly moving into or away from each other.

List three words you have already learned that relate to this term: San Andreas Fault, Dangerous, San Frisco, Los Angeles,

Other important facts? Source of some of the most destructive earthquakes.

What are they? Convection currents are a method of thermal (heat) energy transfer that occur due to temperature differences. These ONLY occur in FLUIDS or in materials that are able to act as fluids. (Think plasticity.)

What causes or caused them? These Convection currents occur due to the huge temperature differences between the core and the crust of the Earth and the ability of the Mantle to move like a liquid.

List three words you have already learned that relate to this term: Thermal Energy Transfer, Fluid, Plasticity

Other important facts? The Mantle is NOT liquid. It is NOT magma or lava. It is SOLID.