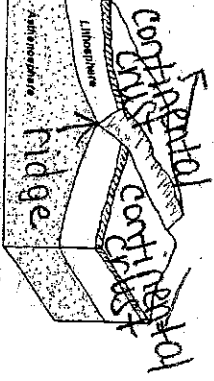
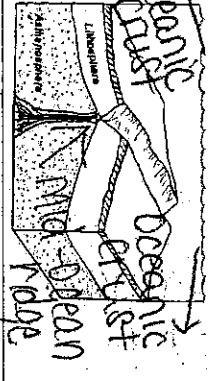
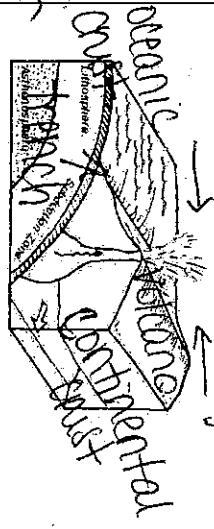
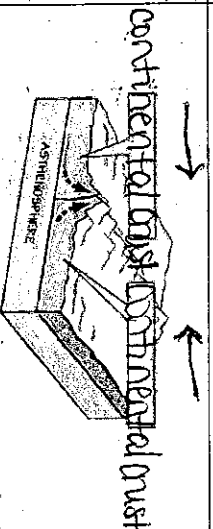
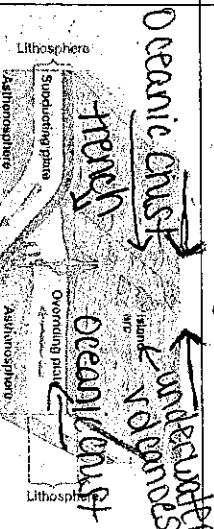
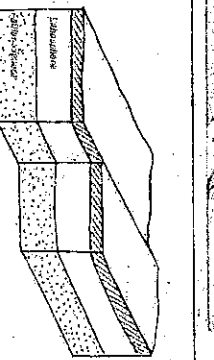


Type of Boundary	Label the types of crust, arrows showing direction of movement & effects	Description	Examples
Divergent Continent - Continent <u>not</u> under water con land		2 continental plates spread apart and cracks form (rifts) form. Magma can rise and squeeze between the cracks forming volcanoes.	Ireland Africa rift valley
Divergent Ocean - Ocean under water		2 oceanic plates spread apart, magma is forced upward pushing the older seafloor away in opposite directions, forming a ridge.	mid ocean ridge mid-Atlantic ridge
Convergent Ocean - Continent land meets water		oceanic plate goes under the continental plate trench forms, rock melts underground, magma is forced up and forms a volcano.	Andes Mountains
Convergent Continent - Continent		the crust buckles and pushes upward forming mountains no volcanoes!! (subducting)	Himalayas Mountains
Convergent Ocean - Ocean		plates are coming together, subduction occurs causing trenches when oceanic plates go under land plate, magma can squeeze up creating volcanoes & mountains under water → erupted magma causes volcanic islands	Japan Japanese Trench
Transform		when one plate slips past another plate suddenly, earthquakes occur	California Coast-San Andreas Fault

* Divergent cause: plates move apart
Transform effect: mid-ocean ridges, rift valleys,
 Importance: new rock is formed

Both boundaries create new landforms.

Volcanoes and Earthquakes form along tectonic plate boundaries? But Why?

plate movement, magma rising as a result of plate movement (new rock)

When plates move, they can interact in several ways:

- They can move toward each other
- They can pull apart from each other
- They can slide alongside one another

The result of plate movement can be seen at plate boundaries.

divergent Plate Boundary: two plates are moving apart and new crust is created.

In your own words, discuss the cause, effects, and importance of divergent boundaries.

- 1) cause: plates move apart
- 2) effect: mid-ocean ridge, rift valleys, volcanoes
- 3) importance: new rock is formed (new landforms)

Convergent Plate Boundary: two plates collide

Convergent Plate Boundary: Oceanic → ← Continental (land and water meet)

- The denser oceanic plate subducts (goes down), under the continental plate into the mantle.
- A deep sea trench is created where one plate bends and sinks.
- high temperatures cause rock to melt around the subducting plate as it goes under the other plate
- Newly formed magma is forced upward along these plate boundaries, forming

* volcanoes

New crust is added at divergent boundaries while it disappears below the surface at the subduction zones of convergent boundaries.

Convergent Plate Boundary: Continental → ← Continental

earthquakes are common at these convergent boundaries, but volcanoes do not form because there is no, or little, subduction no volcanoes

Convergent Plate Boundary: Oceanic → ← Oceanic no volcanoes

- A colder, older, denser oceanic plate subducts (goes down), under another oceanic plate into the mantle.
- A deep sea trench is created where one plate bends and sinks.

undersides ^{high} temperatures cause rock to melt around the subducting plate as it goes under the other plate

- Newly formed magma is forced upward along these plate boundaries, forming volcanoes.
- Over millions of years, erupted lava piles up until it rises above sea level to form volcanic islands.

In your own words, discuss the cause, effect, and importance of convergent boundaries.

- ① cause: plates are coming together
- ② effect: volcanoes, volcanic islands, trenches, mountains, subduction
- ③ importance: new lands are formed; older land is destroyed

Sometimes volcanic islands form due to the movement of lithospheric plates over hot spots (Hawaiian Islands)

Transform Plate Boundary: Plates slide Past Each Other

Plates move in opposite directions or in the same direction at different rates.

These plate boundaries do not destroy or build up Earth's crust.

Based on what you have learned so far, what causes the lithospheric plates to move?

convection currents in the mantle

Volcano - a mountain that forms when layers of lava and ash erupt and build up.

When pressure from rising magma in the volcano becomes too much, it erupts gases, ash, and lava.