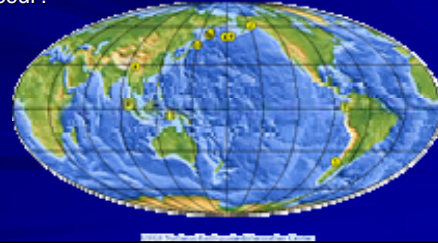


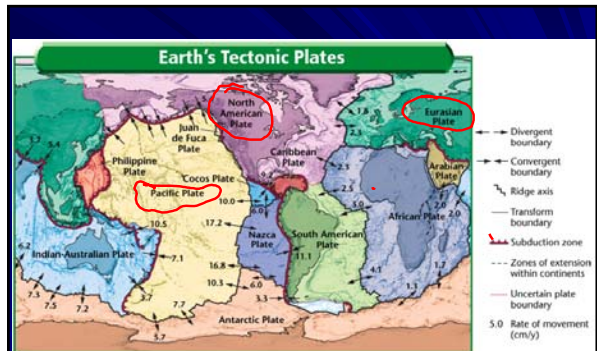
Plate Tectonics

It's a theory

- Why do earthquakes only happen in some places?
- Why are there distinct zones where Volcanoes occur?



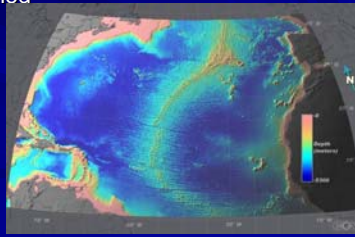
- Plate Tectonics Theory
- Explains why earthquakes and Volcanoes occur
- Earth's crust consists of sections of crust broken into pieces
- These pieces are called plates



Write Names of Plates

Plate Boundaries

- Divergent
- Sea Floor Spreads
- New crust is formed
- 2-3 cm/year



Divergent Boundary

- Found on the sea floor
- Mid ocean Ridge
- Oceanic Crust
- Mid Atlantic Ridge,



- Found on land
- Rift valley
- East Africa – this may some day be an ocean basin



Convergent Boundary

- Plates move toward each other
- 3 types classified by the type of crust involved

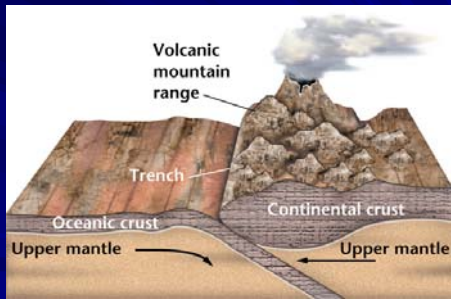
1. Ocean-Ocean

1. Ocean-Ocean

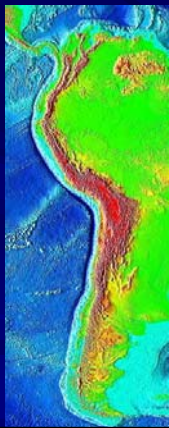
- Subduction Zone
 - One plate slides under the other
 - It eventually melts & gets recycled into earth
- Trench
 - Deep zone of ocean
 - Mariana Trench
- Island Arc
 - Chain of volcanic islands
 - Melted crust rises up, breaks through ocean floor
 - Aleutian Islands, Japanese Islands

1. Ocean-Ocean

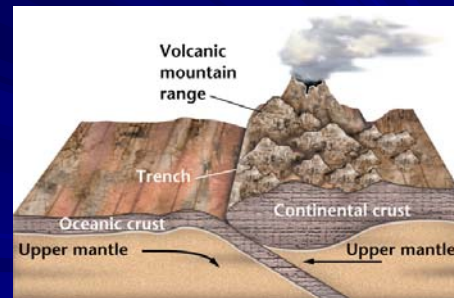
2. Continent-Ocean



- Subduction Zone
- Trench
- Volcanic Mountain Range on Land
- Peru-Chile Trench
- Andes Mountain Range

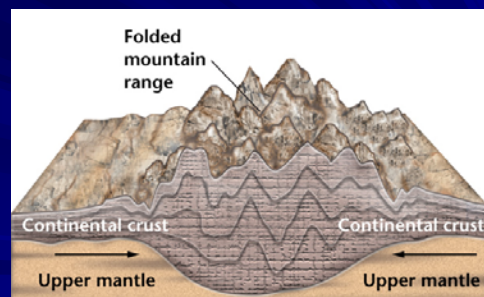


[Andes Topo Link](#)



Continent-Continent

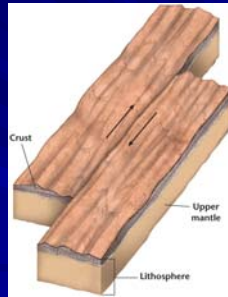
- Continents are pulled together at subduction zone
- Ocean Floor is pulled under and continents collide
- Continent is less dense and stays on top
- Material bunches up / folds to form mountains
- Himalayan Mountains



[Topo Profile Link](#)

Transform Boundaries

- Plates Slide past each other
- Crust is deformed and fractured
- Most common along mid ocean ridges



Transform Boundaries

- Most Known
- San Andreas Fault, CA
- Responsible for CA earthquakes

