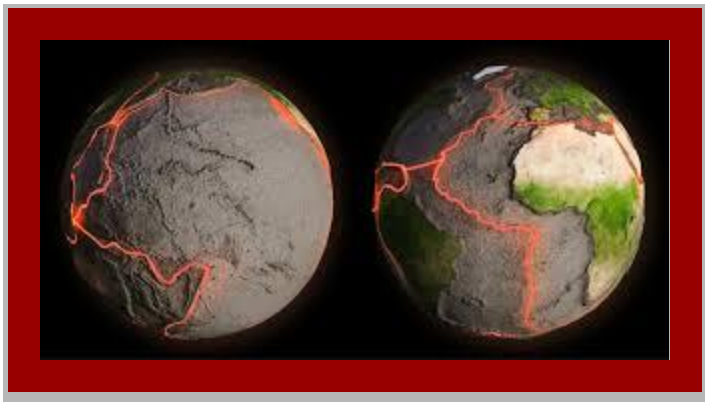
Earth - Interactive Research Booklet

Research the Boundaries by clicking HERE



EARTH LAYERS DIAGRAM

CONTINENTAL DRIFT COMIC STRIP

DIVERGENT BOUNDARIES
- Divergent - Oceanic Crust
- Divergent - Continental Crust

CONVERGENT BOUNDARIES
- Convergent - Continental/Continental
- Convergent - Continental/Oceanic
- Convergent - Oceanic/Oceanic

TRANSFORM BOUNDARIES
- Transform Boundary

MOUNTAINS

VOLCANOES

FAULTS

EARTHQUAKES

EARTH LAYERS DIAGRAM

INSTRUCTIONS

Drawing of the Layers of the Earth *on white paper*. This should show the correct thicknesses of the earth. Include all facts from your notes.
Add ALL of the layers including the Lithosphere, Mesosphere, and Asthenosphere, Crust (Oceanic Crust & Continental Crust), Mantle, Outer Core, & Inner Core

Interactive

Difference between lithosphere, crust, etc.

New Layer found

Also see any additional links on my website.

CONTINENTAL DRIFT COMIC STRIP

INSTRUCTIONS

Use these notes to create a comic strip on white paper. Pictures do not have to be wonderful, but the information needs to be! It must include:

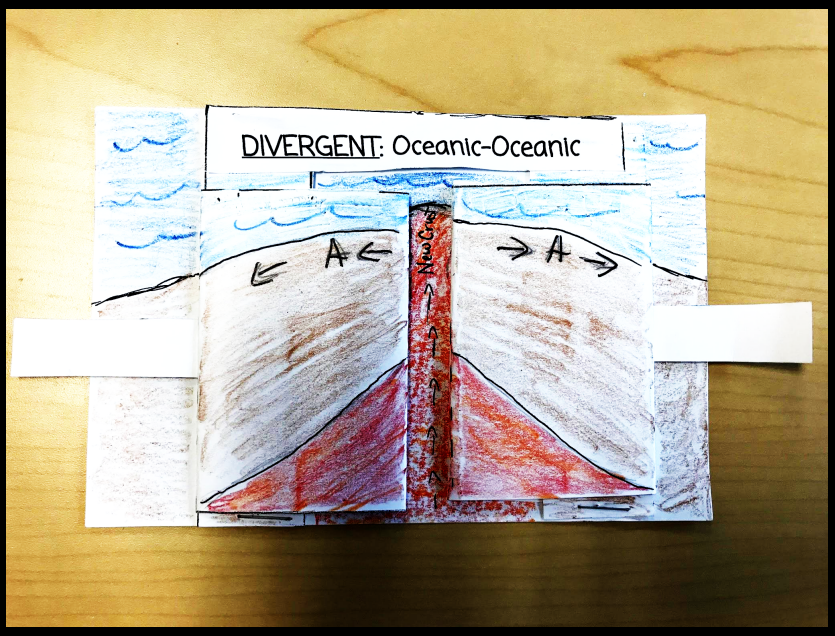
1. Wegner introducing himself. What kind of scientist was he?
2. Wegener sharing his hypothesis (including all 3 forms of evidence he provided and explain each one.)
3. The reaction to Wegener's ideas. Try to imagine what people thought. (Do you think everyone believed him right away? Why?)
4. Finally, include the scientific evidence found that helped to support Wegener's theories years later. (All four types, including HOW the plates move based on what we now know. Explain each one)

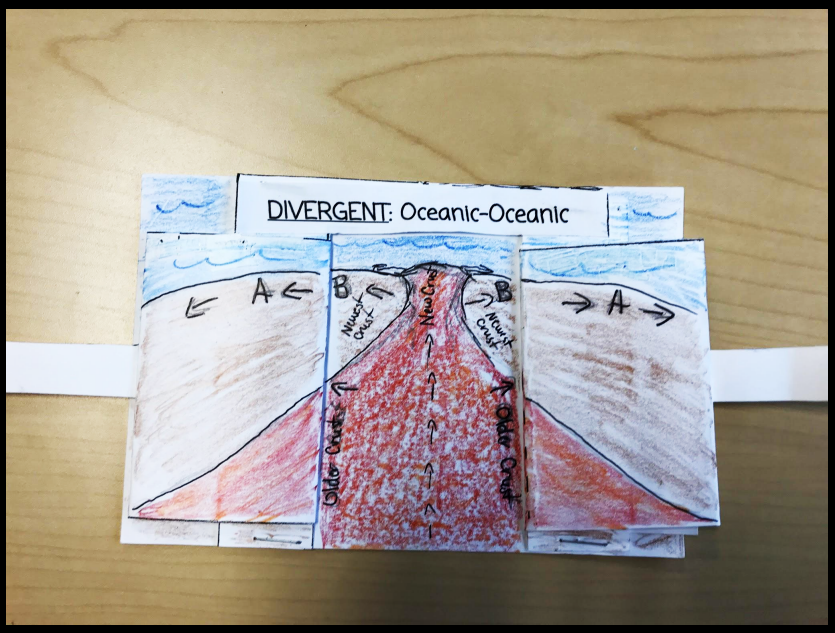
******BE DETAILED! BE SPECIFIC! BE CREATIVE!***

DIVERGENT BOUNDARIES

[Research the Boundaries by clicking HERE]

Divergent - Oceanic Crust



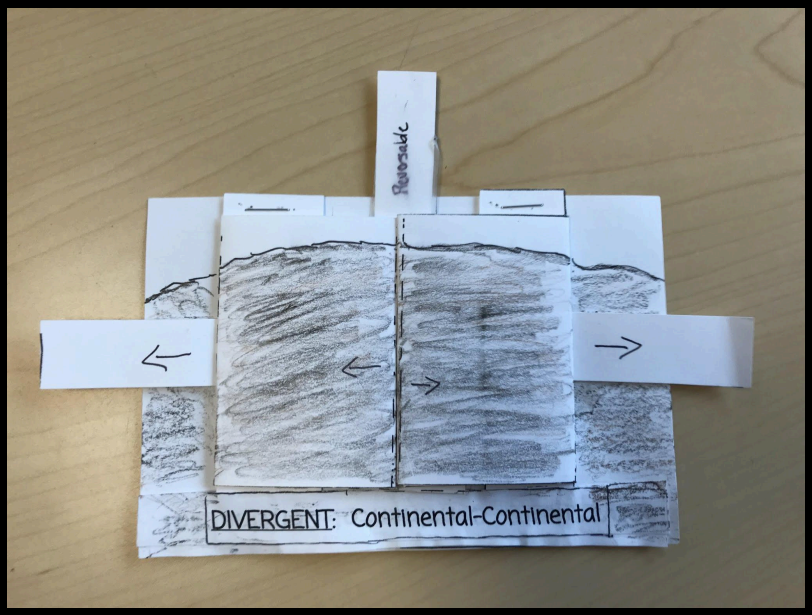


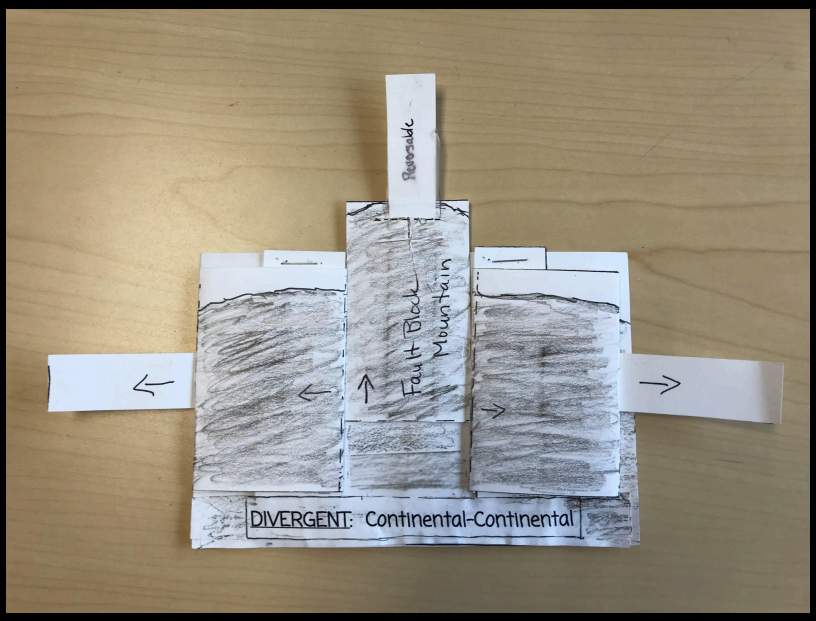
Color and Label everything. Show how the crust gets pushed to the side.

What does this create? Where?

Use the link at the top to research divergent boundaries. Label everything. Write notes on everything and add them to your booklet.

Divergent - Continental Crust





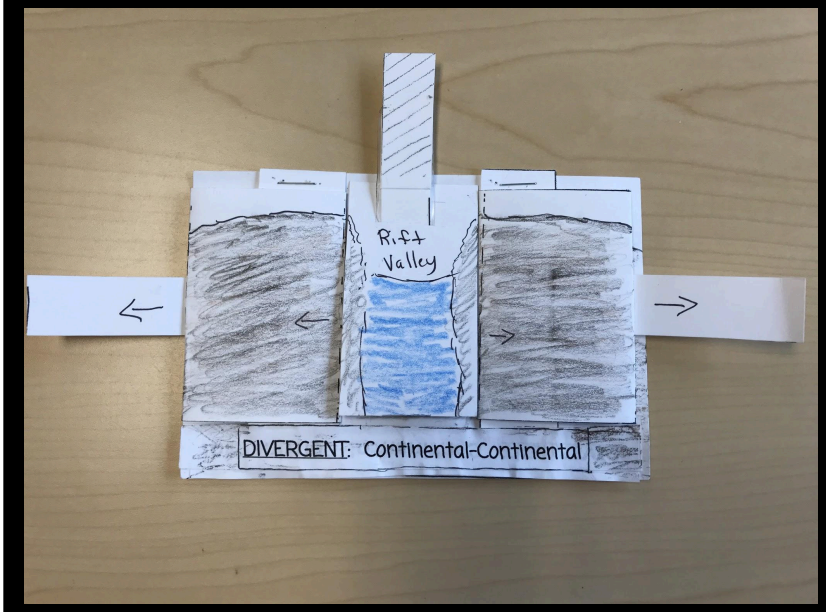
GO TO THE NEXT PAGE TO SEE HOW TO DO THE RIFT VALLEY.

What is created when continental crust splits?

Notice that the middle flap is reversible.

Use the link at the top to research divergent boundaries. Label everything. Write notes on everything and add them to your booklet.

On the back of the middle piece (where



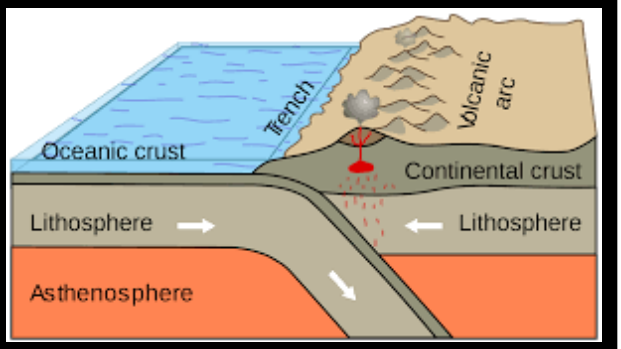
you colored a mountain, color a rift valley. This one has water in it.

CONVERGENT BOUNDARIES

[Research the Boundaries by clicking HERE]

Convergent - Continental/Continental

Convergent - Continental/Oceanic



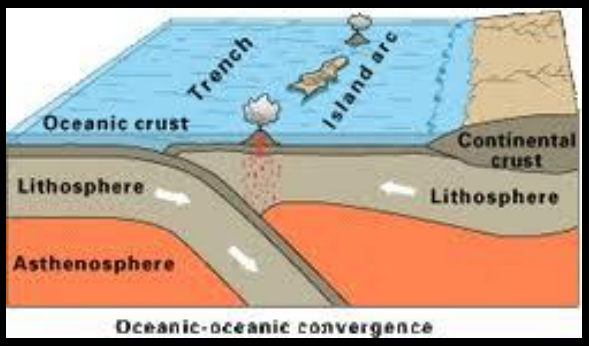
Label everything. Cut slits where you see them drawn heavily on the sheet.

Cut out the pattern for the volcano on the printed sheet. Use it to cut out a matching transparent sheet.

Draw and color a volcano on the transparent sheet with permanent markers like so:

This will fit behind in the slits such that the volcano 'grows.'

Convergent - Oceanic/Oceanic



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Draw and color a volcano on the transparent sheet with permanent markers like so:

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TRANSFORM BOUNDARIES

Research the Boundaries by clicking HERE

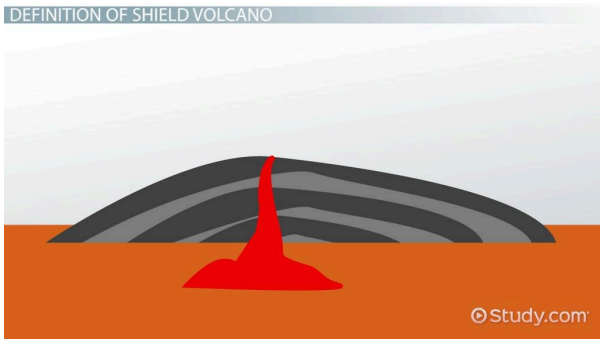
Transform Boundary

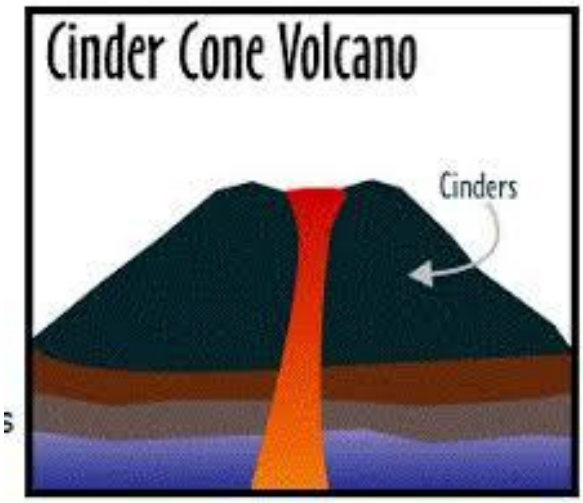
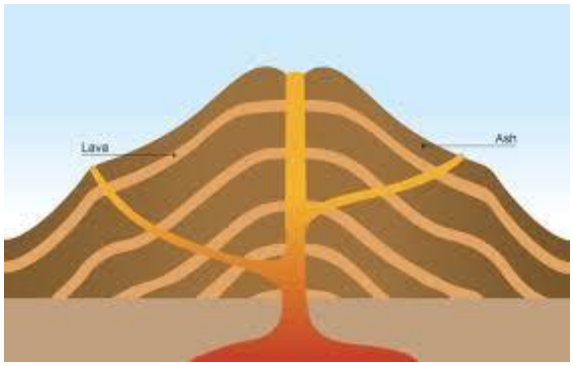
MOUNTAINS

- Student Fill in the Blank Sheet
- Add information to the appropriate places in this booklet.

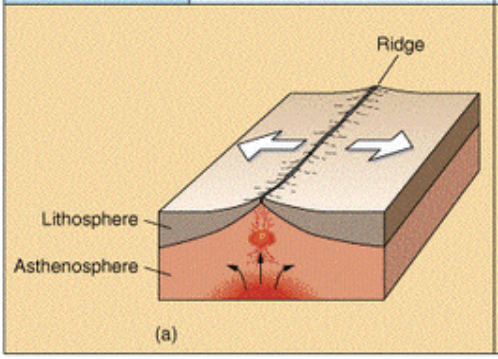
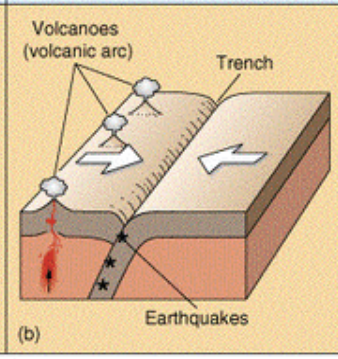
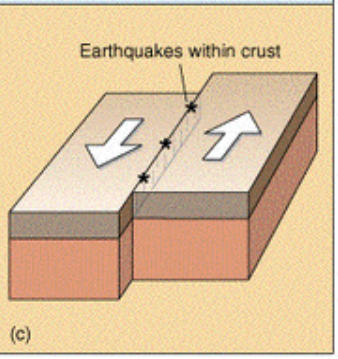
VOLCANOES

- Student Fill in the Blank Sheet
- Draw pictures of these 3 volcanoes on a page in this booklet:
  shield volcano, cinder cone volcano, composite volcano
- Add the important information from the fill in sheet to the page(s) with the volcano drawings.

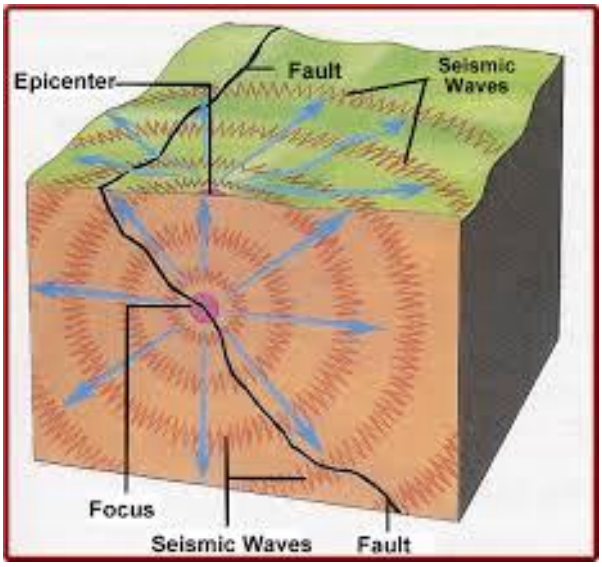
SHIELD VOLCANO	

CINDER CONE VOLCANO	
COMPOSITE VOLCANO	

FAULTS

Type of Margin	Divergent	Convergent	Transform
Motion	Spreading	Subduction	Lateral sliding
Effect	Constructive (oceanic lithosphere created)	Destructive (oceanic lithosphere destroyed)	Conservative (lithosphere neither created or destroyed)
Topography	Ridge/Rift	Trench	No major effect
Volcanic activity?	Yes	Yes	No
			

EARTHQUAKES



- On two new ‘pages’ in your folder research booklet, draw and label this image. You can use 1-2 pages in your booklet as necessary.

- Use the main powerpoint on my Earth Unit page to label and define all of the parts of an earthquake.
    - This will include
        - FAULTS
        - Effects of Earthquakes