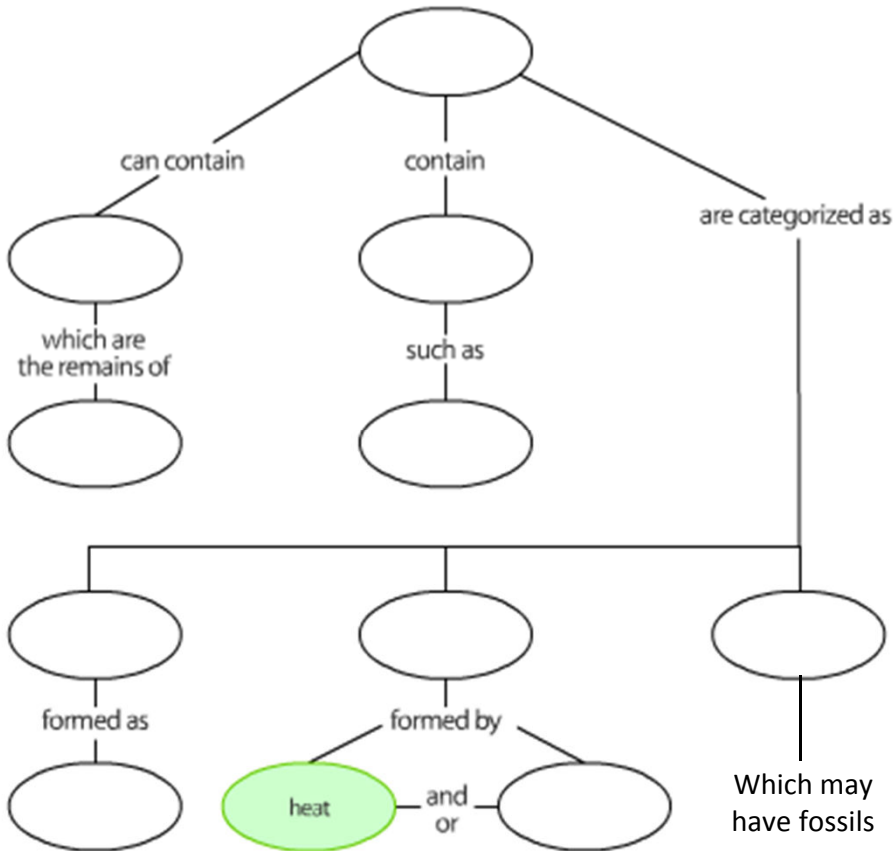


Directions: Over the next few days you will be working with your group to gather information as a review for the 2nd quarter Geology benchmark test on Tuesday, January 13th. Below are the descriptions of the different roles for each group member. Fill in the name of the group member designated for each role.

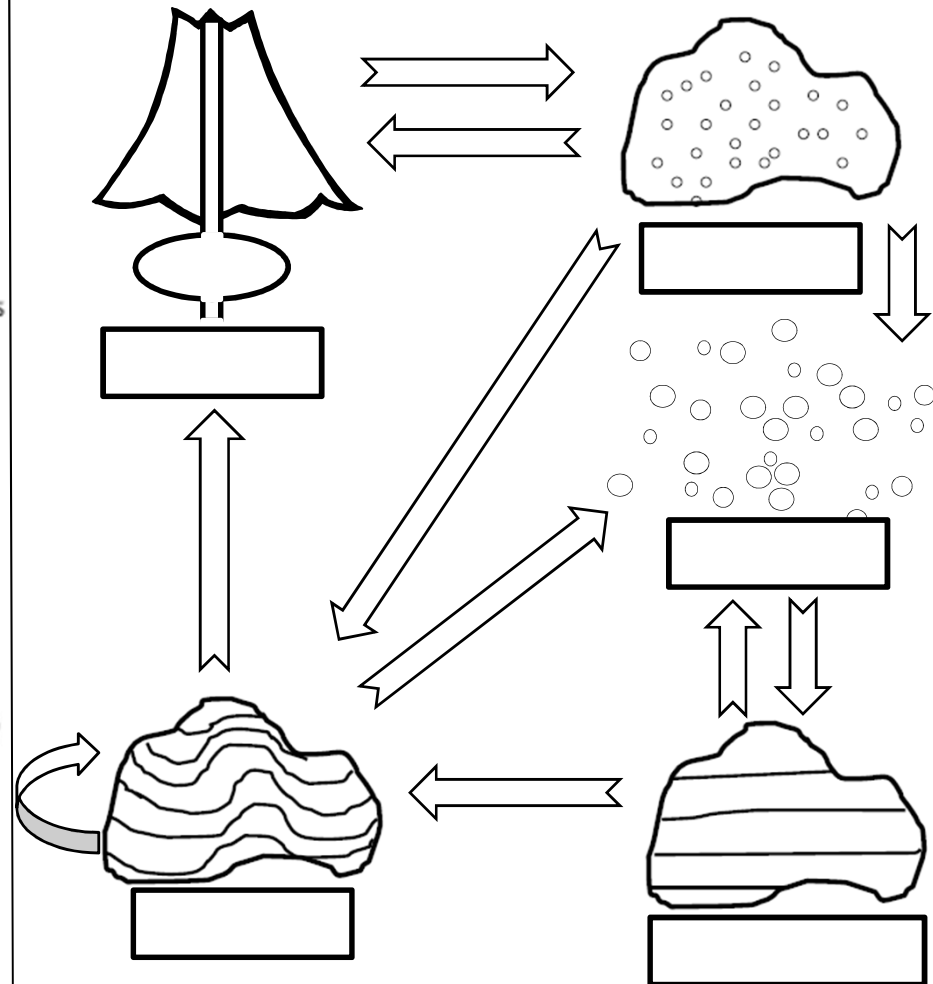
- _____ : **Facilitator**– Makes sure that every group member’s voice is heard. Coordinates distribution and clean-up of materials.
- _____ : **Time Keeper**– Encourages the group to stay on task. Announces when time is halfway through and when time is nearly up!
- _____ : **Recorder**– Compiles group members’ ideas on collaborative paper for the *checker* to grade. Don’t forget to add on to your sheet too!
- _____ : **Checker** – When the group is in agreement of their answers for each station retrieves the answer key from Mrs. Feldmann and grades the group’s collaborative paper. Helps group members correct their personal review sheets. Turns in the collaborative paper on behalf of the group to Mrs. Feldmann at the end of class.

Station 1 or Station 4: Rock Cycle

Concept Map



Rock Cycle



KEY FOR ARROWS

- Melting
- Heat & Pressure
- Cooling
- Lithification (compaction & cementation)
- Weathering & Erosion

Station 2 or Station 5: Plate Tectonics

Pangea

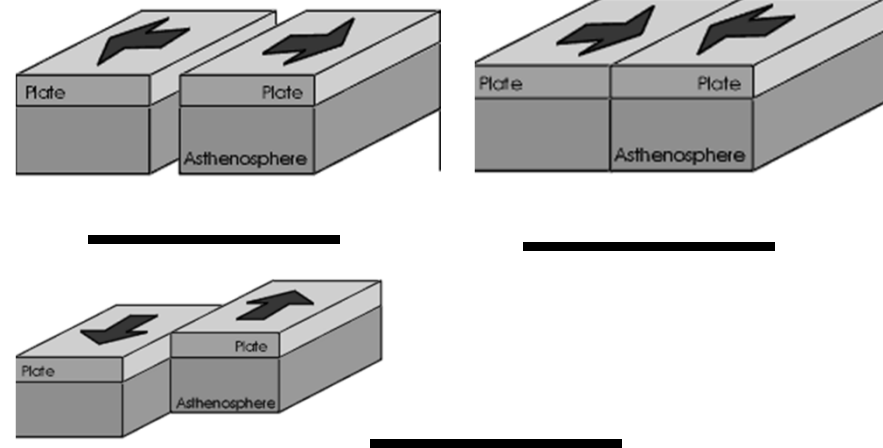
Pangea is a supercontinent that existed approximately 225 million years ago. Through the motion of Earth's tectonic plates the supercontinent divided into the landmass arrangement we know today.



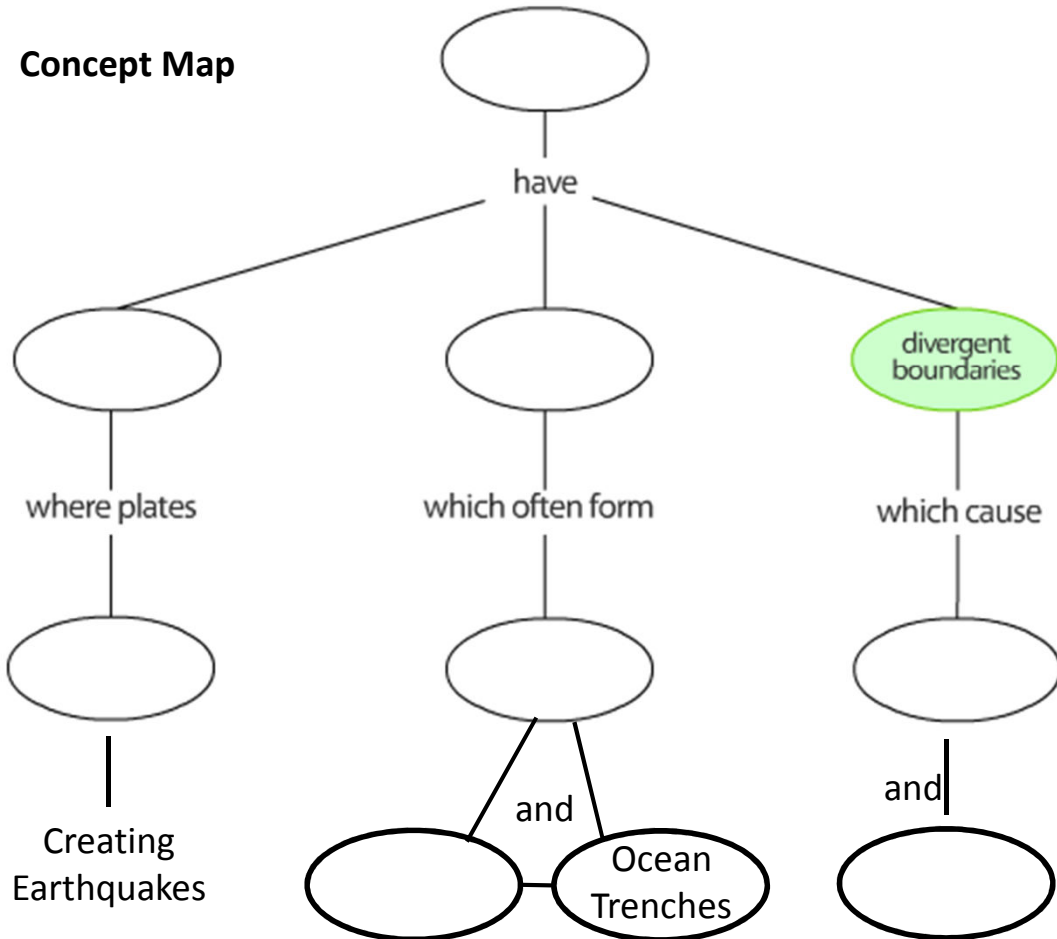
1. How were fossils of animals and plants critical in Wegener's theory of continental drift and the existence of Pangea?

Types of Plate Boundaries

Name the three types of plate boundaries:

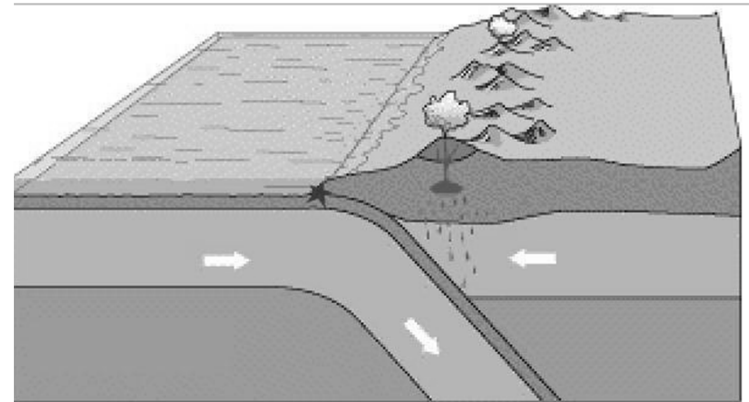


Concept Map



Subduction

Label the components in the diagram showing subduction at a convergent boundary.



Triangulation

By measuring the time difference between P-Waves and S-Waves from an earthquake, scientists can locate the epicenter. The epicenter is the point on the surface of the Earth directly above the focus (origin of the quake). Mark the epicenter in the diagram with an X.



Station 3 or Station 6: Layers of the Earth, Maps & Erosion

Layers of the Earth

Concept Map

The solid part of the Earth, called the

geosphere

can be divided into physical layers such as the



which is divided into



which move around on top of the



can be divided based on composition into the

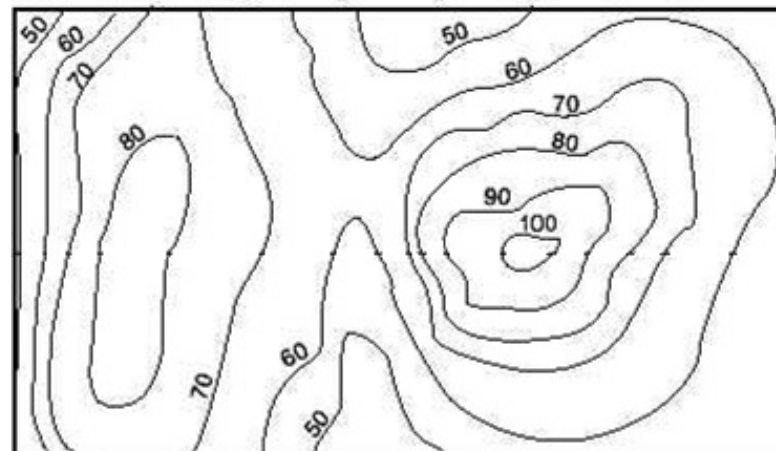


This is the thickest layer of the Earth

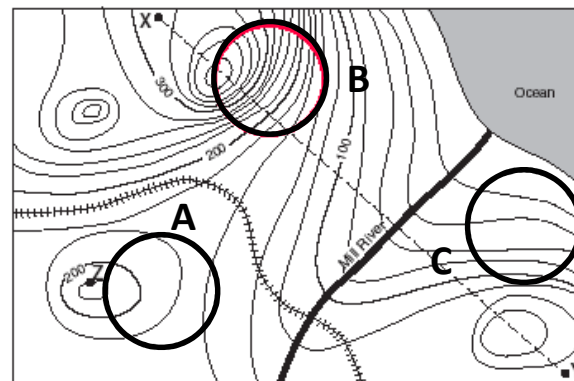
Maps

1. Label the tops of the two hills with an X.

2. There is a building with an elevation of 90 feet. Mark a possible location for this building on the map with the letter A.



3. Which of the following letters shows the steepest slope? How do you know?



Erosion

Soil erosion occurs worldwide and is normally a slow process. The eroded soil is often deposited elsewhere; however, sometimes soil erosion can cause problems especially for farms and river banks. Therefore there are strategies to help in limiting soil erosion!

1. How is contour plowing (farming) different then crop rotation?

2. If the sides of a river are eroding away, being washed down stream, what are some suggestions that you have to help keep the soil in place?

Additional Study Aides

- Lithosphere Impact Sheet!!! ← **Important!**
- Erosion Quiz **AND** Erosion Study Guide
- Past Tests & Study Guides:
 - Rocks & Minerals
 - Earthquakes, Volcanoes & Plate Tectonics