The Effects of Moving Plates

Engage

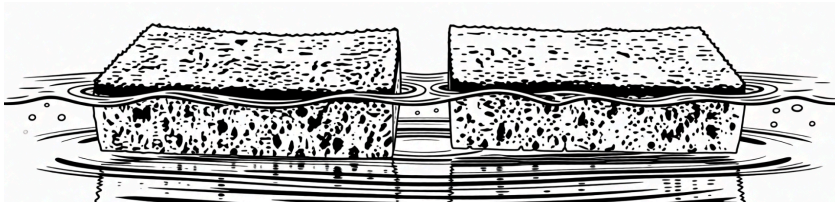
Materials: Two sponges about the same size

What To Do:

1. Place two sponges down next to each other on a flat surface.
2. Gently push the sponges together.
3. Continue pushing until the sponges crash into each other.
4. Draw what you observe below.

5. If these sponges were next to each other and floating in a basin of water, what would happen if they were pulled apart? Would the water stay away, or would it flood into the space between?

6. Color the sponges and the water below.



Explore

Materials: colored pencils, Plate Boundary Map

What To Do:

1. Don't glue in the map your teacher gives you until you are finished coloring it.
2. Find all the arrows on the map (10) and color them orange.
3. Find the Nazca Plate and lightly color it blue.
4. Find the South American Plate and color the continent green and the ocean blue.
5. Find the mid-Atlantic Ridge from the map in a previous lesson and trace it in red.
6. Color the ocean on either side of the mid-Atlantic Ridge blue.
7. Find the San Andreas Fault from the map in a previous lesson and trace it in red.
8. Color the North American plate green.
9. Color the Pacific plate blue.

Questions:

1. Look at the arrows on the North American and the Eurasian plates. Are they headed toward each other or away from each other? _____
2. What is happening on the map where these plates are pulling apart? _____
3. Look at the arrows on the South American and Nazca plates. Are they headed toward each other or away from each other? _____
4. What might be happening on the map where these two plates are coming together? _____
5. Look at the arrows on the North American and Pacific plates. What directions are they going? _____ _____
6. Look at the arrows on the Indian plate. What direction are they going? _____
7. What is happening where these two plates are coming together? _____

PLATES OF THE EARTH'S CRUST

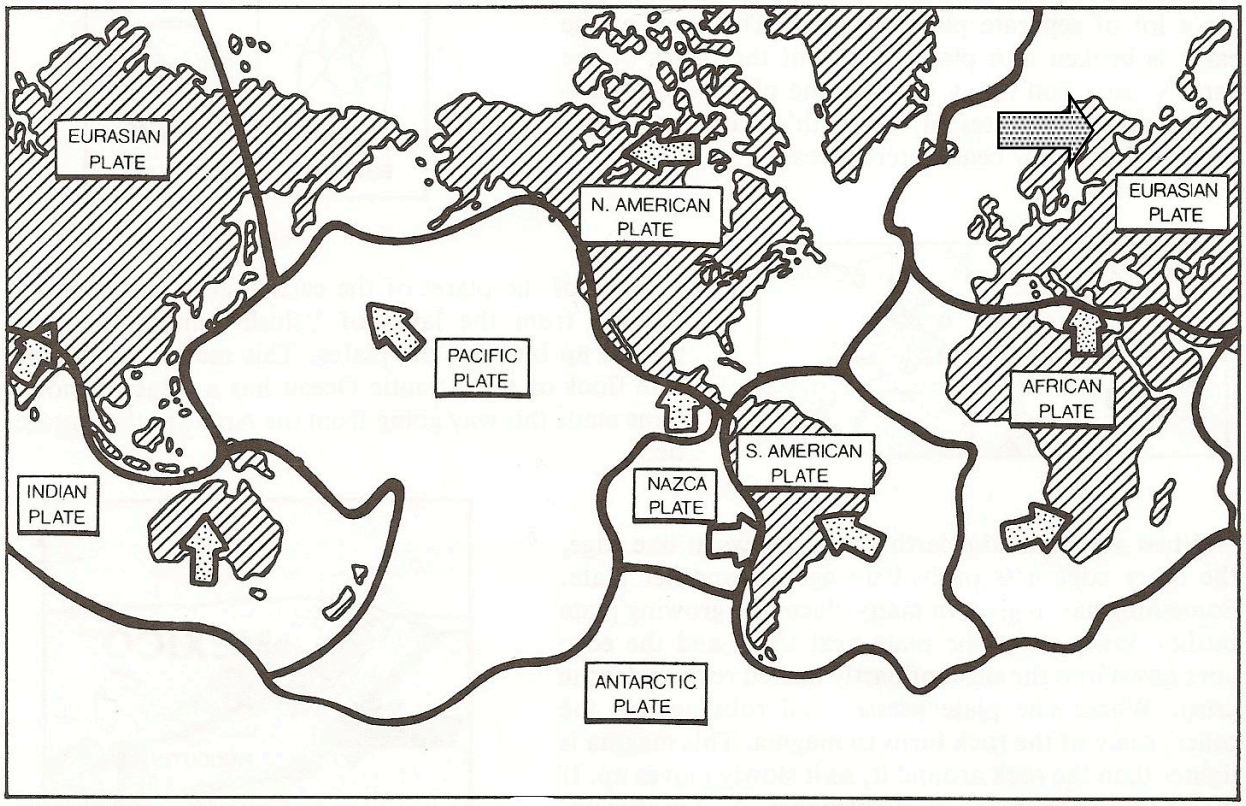
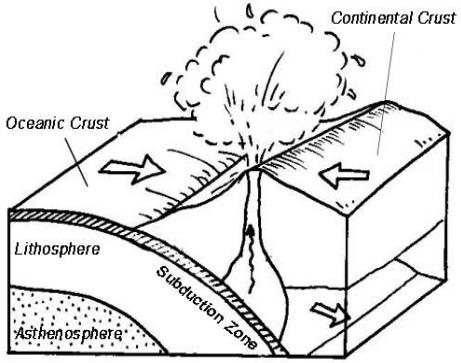


PLATE BOUNDARIES

CONVERGENT	DIVERGENT	TRANSFORM
Explain		

Elaborate

Watch the Power Point "Effects of Moving Plates on www.missdoctorbailer.com and answer the following questions.



1. What type of Plate Boundary is shown?

_____

2. What type of effects does this type of boundary have on the area around it?

_____

_____

Where on the map is it occurring? _____

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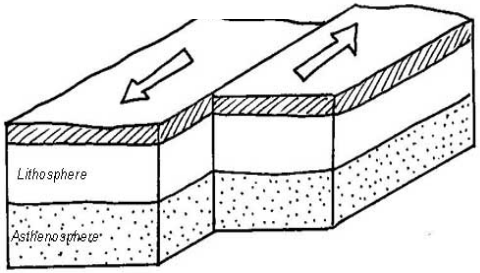

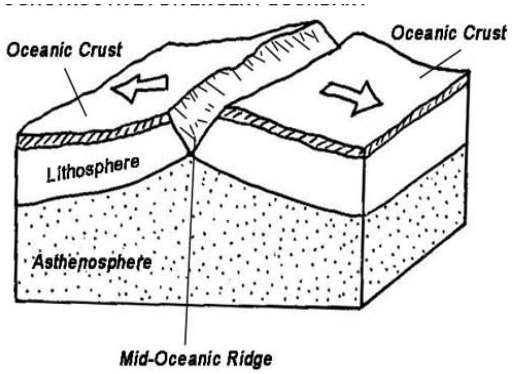

1. What type of Plate Boundary is shown?

_____

2. What type of effects does this type of boundary have on the area around it?

_____

_____

3. Where on the map is it occurring? _____

Evaluate

Name _____ period _____

EXIT TICKET

Why the Plates Move

1. When plates push together, they cause

   A. Ocean basins
   B. Mountains
   C. River Valleys

2. When plates pull apart they cause

   A. Ocean basins
   B. Mountains
   C. River Valleys

3. When plates slide past each other, they cause

   A. Ocean basins
   B. Volcanoes and Earthquakes
   C. River Valleys

4. The type of plate boundary found when plates push together is called -

   A. Convergent
   B. Divergent
   C. Transform

5. The type of plate boundary found with plates pull apart is called -

   A. Convergent
   B. Divergent
   C. Transform