Tectonic Plate Boundary Stations LAB

Name_____

1 PHYSICAL EARTH POSTER

1. What is the symbol for a divergent boundary? Draw it.
2. What is the symbol for a convergent boundary? Draw it.
3. What is the symbol for a transform boundary? Draw it.
4. What kind of boundary is the mid-ocean ridge? (middle of Atlantic ocean)
5. Find the Red Sea to the right of Africa. What kind of boundary runs through the Red Sea?
6. Will this boundary in the Red Sea make the African plate (get closer, move away from, slide past) the Arabian plate??

2 PLATE TECTONICS POSTER

1. Look at the bottom of the poster. What kind of boundary pushes together?
2. What kind of boundary slides past each other?
3. What kind of boundary pulls apart from each other?
4. Look at the right side of the poster. Comparing 25 million years ago to present day, which continent seemed to move the fastest?
5. Since this plate had more inertia, what do you think it did when it rammed into Asia?
6. What mountains are located here?

3 GLOBE

1. Find Florida. Why is it so flat? Why isn't it mountainous?
2. Find the Appalachian Mountains. This mountain range is ancient. Why is it not as tall as the Rocky Mountains which are much younger?
3. Find the Philippines. Feel how bumpy they are. Since they are mostly volcanic islands, what kind of boundary do you think is here?
4. Find California's "tail." There is a transform boundary separating the "tail" from the right side of California. This "tail" is on a plate sliding to the North. What is going to eventually happen to part of California?

POST-IT NOTES

With your 2 bundles of post-it notes, simulate tectonic plate boundaries: convergent, transform, divergent. Draw a picture of each below:

Convergent	Transform	divergent

PHYSICAL EARTH POSTER

1. Find Japan in the top right zone of the poster. Why are there so many volcanic eruptions and earthquakes in this area?

2. Will Ithaca ever have a volcano erupt? Why or why not?

3. Why are there no recorded earthquakes or volcanoes in Australia?

4. Find India and look at the northern edge. You will see Mt Everest, the highest mountain on Earth. Why is it so high?

PLATE TECTONICS POSTER

Are these tectonic plates pulling away from each other, ramming into each other or sliding past each other?

1. South American plate and African plate

A pulling away	B ramming into	C sliding past

2. Are there many earthquakes and volcanoes at this boundary?

3. Nazca plate and South American plate

A pulling away	B ramming into	C sliding past

4. What type of landform has formed all along the east coast of South America?

5. Indian plate and Eurasian plate

A pulling away	B ramming into	C sliding past

6. Which type of boundary creates the most earthquakes and volcanoes?

GLOBE

1. Find the bumpy seam in the middle of the Atlantic Ocean. What is this called?

2. Why is it higher than the ocean floor around it?

3. Find the Rocky Mountains. If we know they are not volcanos, what plate boundary must have formed them in the past?

4. Find the ridge of mountains along South America. If the oceanic Nazca plate (under the ocean just to the left of these mountains) is subducting below the continental crust, what kind of mountains are made?