

Name _____ Date _____ Block _____

Plate Boundaries Lab

The three types of plate boundaries are _____, _____, and _____.

With a convergent plate boundary, it depends on what two types of crust are meeting. The two types are _____ and _____. So there are 3 types of convergent plate boundaries.

You will obtain 3 different colors (or 2) of play dough and construct the different plate boundaries. You will start out each boundary the same, by making the same three colored layers.

#1. Transform Plate Boundary

Start with a square piece of dough with three different colors layered into it. Lay it over two pieces of cardboard (or paper) then gently slide the cardboard by each other. Record your results.

Observations:

1. How did the dough break?

2. Did the dough get roughed up? _____
3. What geologic feature do you think this roughed up clay represents in the real world? _____

2. Divergent Plate Boundary

Start again with another square of layered dough. This time pull the pieces of cardboard apart. You may need to weigh them down.

Observations:

1. How or did the dough break?

2. The tearing of the dough represents what sort of geologic event? _____
3. What sort of material would replace the void left from the removal of the dough?

#3 Convergent

Since we don't have different density materials this will represent a continental versus continental collision. Make 2 sets of squares of equal thickness. You may want to put them on paper so you can move them together completely. Slowly, and steady push the two pieces together.

Observations:

1. Did you see and sort of folding of the dough? _____
2. Did the dough bend or tear? _____
3. What sort of geologic feature was created? _____
4. Did any of the bottom layers become the top layers? _____

Draw a DETAILED cross-section of you two plates. Make sure to use colored pencils to fill in the layers.