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# Plate Boundaries

**Purpose**

The movement of lithospheric plates has created many of earth’s topographical features. The purpose of this lab is to demonstrate the results of plate movement by using models of plates. [[1]](#endnote-2)

**Procedure**

**Materials**

1. Ruler 4. Two colors of clay
2. Paper 5. Plastic knife
3. Scissors

**Sequence of Steps**

1. Draw two 10 x 20 cm rectangles on your paper, and cut them out.
2. Using your hands, flatten out the two pieces of clay to about 1 cm of thickness.
3. Cut each piece of clay into a 10 x 20 cm rectangle.
4. Place a paper rectangle on each piece of clay.
5. Place the two clay models side by side on a flat surface, paper side down. Place your hands directly on the top of the each piece.
6. Slowly push the models together until the edges begin to buckle and rise off the surface of the table.
7. Turn the clay models around so that the unbuckled edges are touching. If the edges have been slightly deformed, smooth them out.
8. Again, place hands on clay models. Apply only slight pressure toward the seam. Slide one clay model forward and the other model backward about 7 cm.
9. C:\Users\Angela\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DRP2N1IJ\MCj04242300000[1].wmfRepeat Step 8 three more times.

**Observations**

1. Draw a picture of your pieces of clay after you have applied pressure 4 times.
2. What type of boundary are you demonstrating with the model in Step 6?
3. What type of boundary are you demonstrating with the model in Steps 8 & 9?
4. How does the appearance of the facing edges of the models in the two processes compare?

1. What are the principal structures that form at the three different kinds of plate boundaries?
2. How does topography of the land, which has been affected by plate movement, determine areas viable for agriculture production?

1. Prescott, Diane (2008). *Plate Boundaries, Lab*. Atwater High School. [↑](#endnote-ref-2)