Convergent Boundaries – Ocean to Ocean

Name: Period:

This exercise will help you see what happens to Earth's crust at convergent boundaries.

- Step 1-Get the 2 pieces of paper that you will use to make your block model.
- Step 2—Color the different layers on the block and on the top piece, using the colors listed in the coloring key. The key will end up being on the bottom of your block. Not all of the patterns and colors will be used.



Step 3—Cut out the block and the top piece. Fold along the dashed lines. Get the top piece and glue the end marked A to the tab marked A on the block. DO NOT GLUE ANY OTHER TABS. You will need to be able to fold it up again and keep it in your binder.

Step 4—Lay out your 5 map pieces again, along with your continent-to-continent block piece.

Step 5—Use the information from the 5-piece map and the blocks to answer the questions below.

1. What are two things that are made when two pieces of oceanic crust smash together? *Hint: read the side of the block.*

| and | |
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| | |

2. What is happening to the two pieces of oceanic crust as they move together?

3. What is formed by magma when a piece of oceanic crust melts? Hint: read the side of the block.

4. What type of rock is on the surface of this block? Hint: look at your coloring key.

The rocks on top are called .

5. Look at the patterns on the sides of the block. What kind of crust is found here but is NOT found under mountains? *Hint: compare your continent to continent block with the ocean to ocean block.*

The kind of crust found under oceans is

- 6. Remember that each tiny black dot printed on your map represents where earthquakes have happened. Where on your map do you see lots of earthquakes in a thick line that are in an ocean?
- 7. The grinding together of pieces of oceanic crust makes a lot of earthquakes over a wide area. How does plotting earthquakes help to determine ocean-to-ocean plate boundaries?
- 8. Why wouldn't you expect to find ocean-to-ocean convergent boundaries on land?