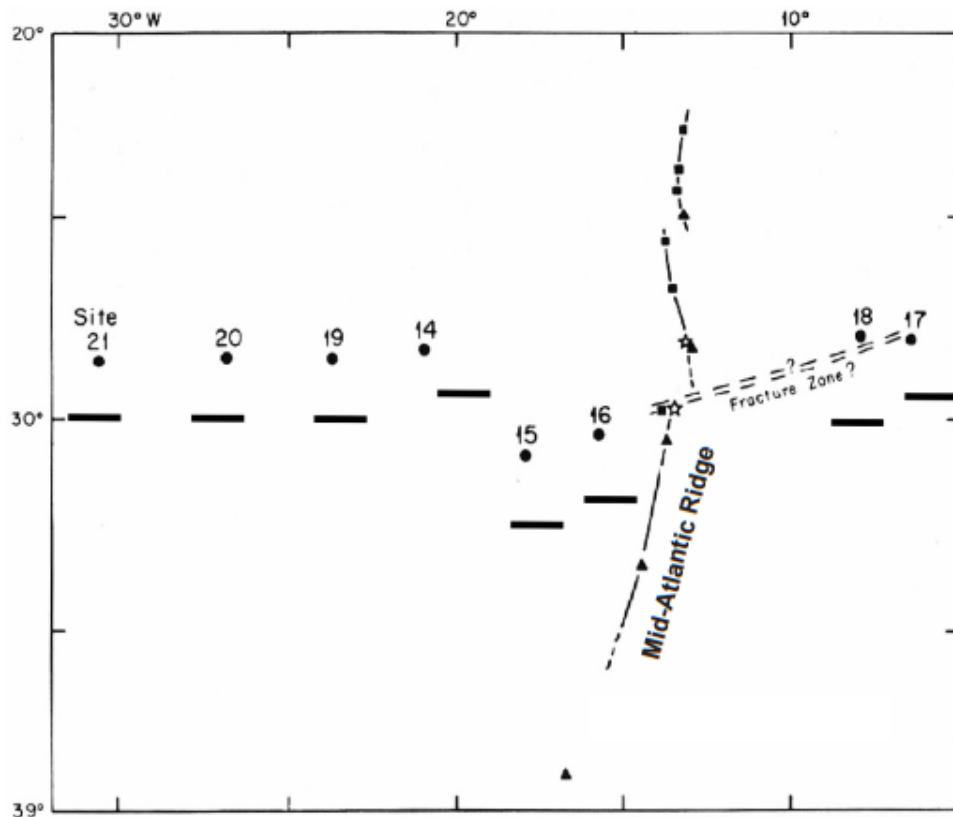


# Sea Floor Spreading Lab /14 name \_\_\_\_\_

## Part 1: Just the Facts!

Use the data below and write the age of the sediments found at each site on the map below. (Write the age on the line by each site.) Then answer the questions on the next page.

Site	Age of Sediments (in millions of years)	Distance from Ridge (in km)
14	40	745
15	24	422
16	11	221
17	33	718
18	26	506
19	49	1010
20	67	1303
21	>76	1686



Conclusions:

NAME \_\_\_\_\_ HR \_\_\_\_\_

Part 1.

1. Where are the youngest sediments found, compared to the Mid-Atlantic Ridge? \_\_\_\_\_

\_\_\_\_\_

2. Where are the oldest sediments found, compared to the Mid-Atlantic Ridge? \_\_\_\_\_

\_\_\_\_\_

3. How does the data support the theory of sea floor spreading? \_\_\_\_\_

\_\_\_\_\_

**Part 2. A Model for Movement.**

<p><b>Materials</b> Base, Templates for plates, Scissors, Tape</p> <p><b>Directions</b></p> <ol style="list-style-type: none"><li>1. Cut out the strips representing the North American Plate and the Eurasian Plate. Place them face to face (letters on the inside) with the number 1 at the top.</li><li>2. Use a small piece of tape to attach the two strips at the bottom edge (by the number 7).</li><li>3. Insert the attached strips into the slot in the middle of the base, from the bottom.</li><li>4. Feed one strip into slot A and the other into slot B. (See diagram)</li><li>5. Push the strips up from below the base until you can see the numbers 3, 4 and 5 on the top.</li></ol>	
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Conclusions:

Part 2.

4. What are you modeling by pushing the strips up through the center of the base? (Hint: think of plate boundaries) \_\_\_\_\_

\_\_\_\_\_

5. What is being modeled at slits A and B as you pull the strips down through the base? (Hint: think of plate boundaries) \_\_\_\_\_

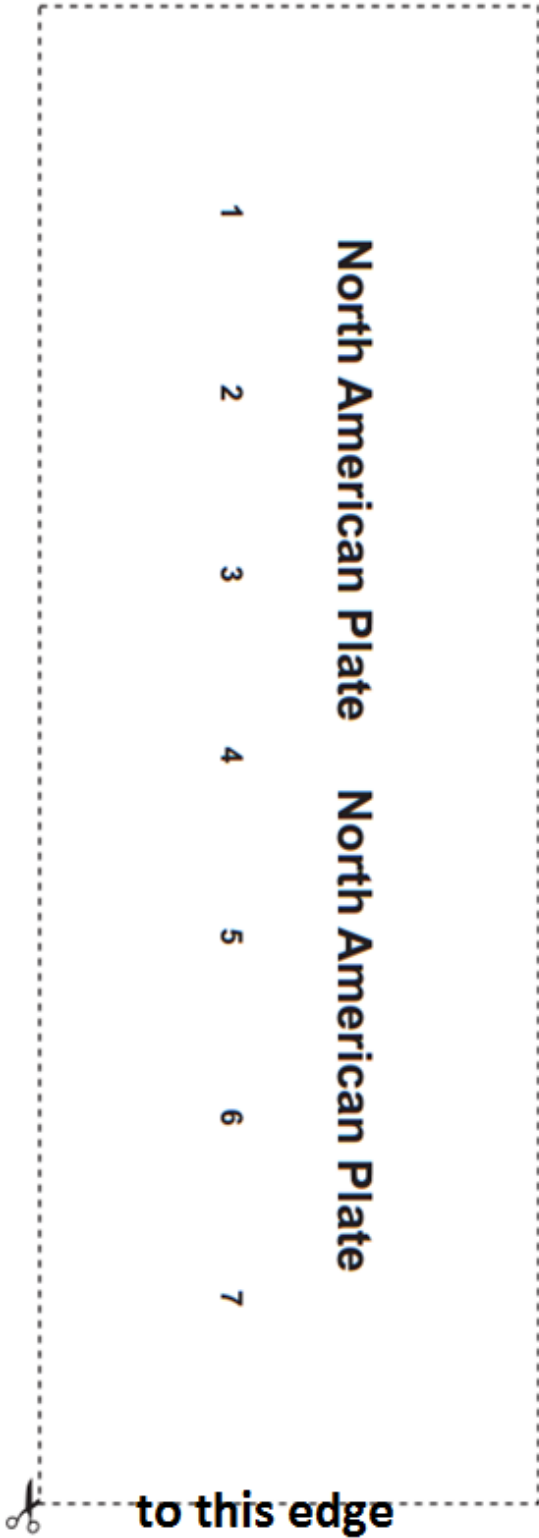
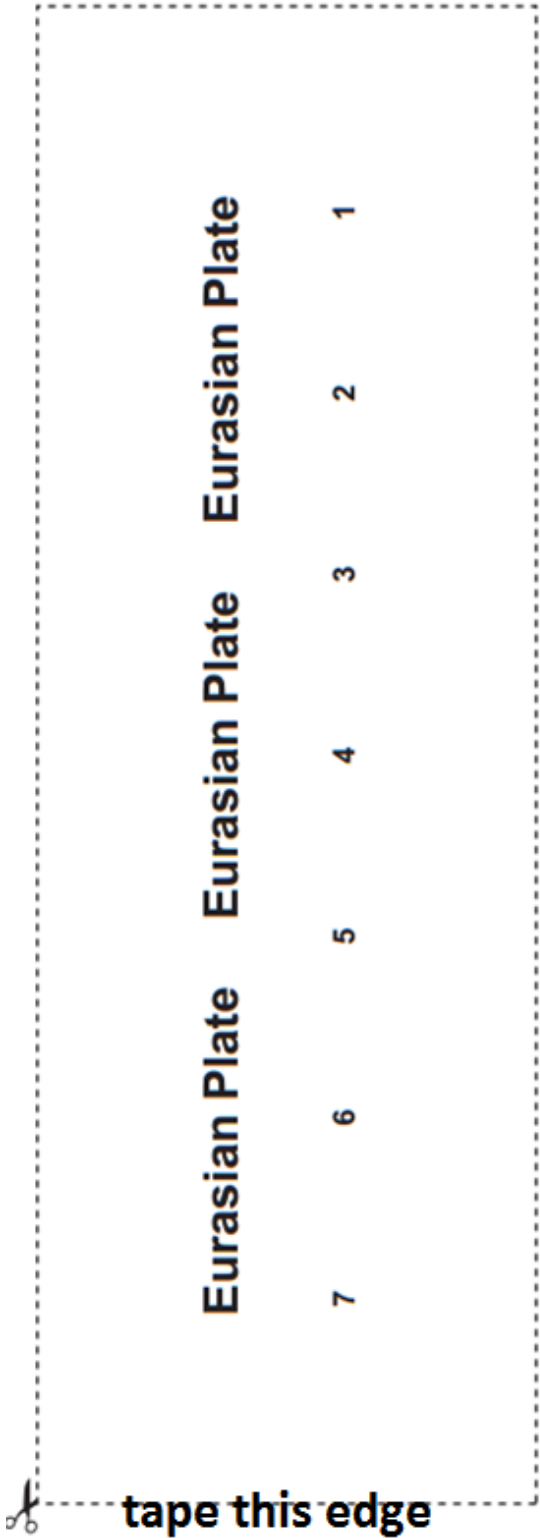
\_\_\_\_\_

6. Seafloor spreading is continuing today along mid-ocean ridges such as the Mid-Atlantic Ridge. Predict what effect this will have on the size of the Earth over time: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Templates for plate strips*



Cut a slit here (SLIT A)

Cut a slit here  
INSERT PLATE STRIPS HERE

Cut a slit here (SLIT B)