

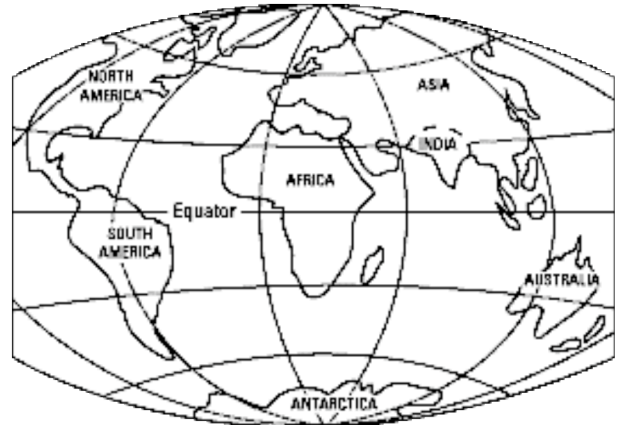
Name _____
Mrs. Krieger

Date _____

Seafloor Spreading

Introduction:

Along the entire length of Earth's mid-ocean ridge, the sea floor is spreading. Although this process takes place constantly, it is difficult to observe directly. In the following activity, you will build a model to help understand this process.

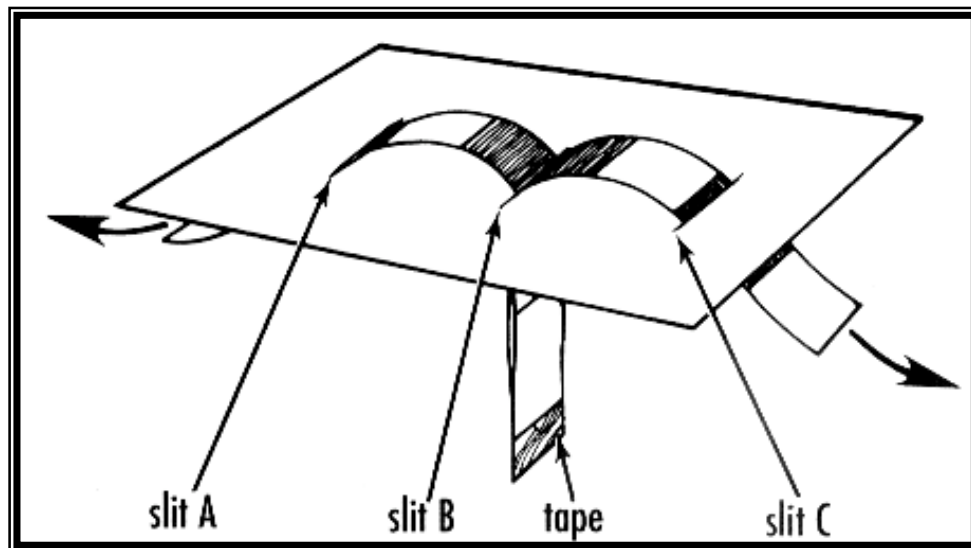


Materials:

Colored Pencils
Scissors
Tape

Procedure:

1. Cut along the dotted lines of the seafloor-spreading mode pattern.
2. Color the areas indicated on the two strips with colored pencils.
3. Tape together the orange ends of the strips with the colored sides facing each other.
4. Thread the two strips through Slit B.
5. Pull one side down through Slit A and the other through Slit C.
6. Pull the strips through the slits so that the same colors on both strips emerge from Slit B and disappear into Slits A and C at the same time.



Questions:

1. What is happening at Slit B? What feature occurs at the corresponding location on the seafloor? _____

2. What is happening at Slit A and C? What features occur at corresponding locations on the seafloor? _____

3. If you were to sample and date the rocks along the colored strip starting at Slit B and moving toward Slit A, what change would you see in the age of the rocks? _____

4. If you were to sample and date the rocks along the colored strip starting at Slit B and moving toward Slit C, what change would you see in the age of the rocks? _____

5. In this model, what do the strips represent? What do the colors represent? _____

6. Why is it important that your model have an identical pattern on both sides of the center slit? _____

7. What causes the plates to be pulled apart? _____

