Curiosity Guide #208
Plate Tectonics
Accompanies Curious Crew, Season 2, Episode 8 (#208)

Spreading Sea Floor
Investigation #8

Description
We can’t feel our continent moving, but we can model it!

Materials
- White paper, 11 by 17 inches
- Lumps of clay
- Markers
- 2 desks or tables

Procedure
- Fold the 11 by 17-inch paper in half.
- Slide the creased fold between two desks or tables that are pressed together. Leave one to two inches of the loose sides of the paper sticking up.
- Fold the loose sides back. Weight each side with a block of clay.
- Carefully pull the two sheets and clay lumps apart a couple of inches.
- Using a colored marker, color the seam where the paper is coming through.
- Pull the two sides of the paper a couple of inches further apart, and then lay down another marker stripe.
- Repeat until the paper is all the way up.
- The clay blocks represent North America and Europe. What do you think the model shows us about their continental movement?
Explanation
The clay blocks represent the movement of the European and North American continents away from one another, which causes the separation of the ocean floor in the mid-Atlantic. The paper represents the ridge of molten lava that comes up through the floor of the ocean. The colored strips help identify the age of the rock, as well as the change of magnetic polarities in history. Scientists believe that the continents are moving away from each other at a rate of 1 inch every year.

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