

Name _____

GRAHAM CRACKER PLATE TECTONICS

Purpose: 1) Identify forces that shape features of the Earth
 2) Predict land features resulting from gradual changes
 3) Represent the natural world using models and identify their limitations

Background Information: Plate boundaries are found at the edge of the plates. There are three types:

Convergent – Places where plates crash or push together; Mountains, earthquakes, and volcanoes form where plates collide. When oceanic plates collide with continental plates, the less dense oceanic moves under the continental plate in a process called subduction. When two continental plates collide, mountains form.

Divergent – Places where plates are moving apart, forming rift valleys.

Transform – Places where plates slide past each other; the sliding motion causes earthquakes

Materials:

Graham cracker	Cake Frosting	Styrofoam Paper plate
Water	Plastic knife	

Procedure & Questions:

1. Spread a thick layer of frosting on the paper plate.
2. Break your cracker into 4 sections.
3. Wet the end of one section with water.
4. Gently put the wet cracker section and a dry cracker section on the layer of frosting.
5. Push the wet cracker and a dry cracker together. Record your observations in a diagram.

What tectonic process(es) does this model?

What is a limitation of this model?

Draw and label a diagram of this process: