



Summer 2020 Lesson

Class: Science

Grade Band: 2-5

Teacher: Mrs. Bickel

Lesson: The Power of Plates

Objective: Students will simulate how Pangaea moved apart to form the 7 continents we know today. They will also see how moving plates on the Earth's surface work to create landforms.

Materials: 3 pieces of paper and bowl with water in it

Simulation #1: What is Pangaea?

Scientists believe that the 7 continents of the world were once connected together in one big continent call Pangaea but then they broke apart and drifted apart. Let's see how that could have happened. Rip a half sheet of paper into 7 pieces and place the pieces close together on top of the water in a bowl. Now, begin to move the bowl slightly. Notice the 7 pieces start to slowly drift apart from one another.

Although we are moving our continents by causing waves in a bowl of cold water, the forces that caused Pangaea to move were due to hot inner core causing a boiling effect in the mantle that moved the plates but we can't do that because of it not safe to use boiling water in class

Simulation #2 plate movements

The Earth's crust is divided into sections know as plates. This simulation show how landforms like mountain and valleys are created thru the movement of plates. You should start by putting one piece of paper under each of your feet. First, play around a little bit sliding around on your plates. Then make the "plate" under each foot slam together. If part of paper is sticking up it represents forming a mountain. When you scoot the plates apart and a gap is formed that's like making a valley. Now stop for a minute a rip a small piece of the edge of the paper. If that hole was in a plate it would become a way for magma/ lava to come to the surface of the earth.

Vocabulary: plate tectonics, landforms, Pangaea, movement,