Lesson #1 Worksheet #1

Plate Movement Stations Worksheet

Station 1

Take a look at the pan of pudding. Think of the cookies as the earth's plates. Think of the pudding as the molten rock (mantle) that the plates are moving on. Remember that we learned that the plates are floating on the molten rock (mantle), just as the cookies are floating on the pudding. Make a drawing of the earth's plates floating on top of the hot molten rock (mantle). Label the plates and the molten rock (mantle).

Station 2

Take the ball of clay and place it on the newspaper. Using your hands, roll the clay back and forth to form a rope of clay. Make your clay rope about 8 inches long. When you are done forming your rope, place it back down on the newspaper. Using your fingers, push both ends of the rope inwards, towards each other.

When you push the clay rope inwards, what happens to the clay?

What you are seeing is similar to what happens when earth's plates move towards each other. Draw a picture and use words to describe what you see.

What is the name of the place where two plates are moving towards each other?

Station 3

Take a look at the shoebox. The paper represents the earth's plates and the inside of the shoebox represents the mantle. Place your hands inside the shoebox and pull the paper downwards. After you do this, push the paper up through the slot. What you are seeing is a demonstration of what happens when the earth's plates move together and then apart. When you pull the paper down through the slot, it shows what the plates look like when they are coming together. When you push the paper up through the slot, it shows what the plates look like when they are moving apart.

Describe and draw what happens when you first pull the paper.

Describe and draw what happens when you push the paper through the slot.

What do we call the places where plates are moving apart?

Station 4

Rub the sandpaper together. This demonstrates when two plates are sliding and grinding against one another.

How does it feel? Rough or smooth?

Does the sandpaper glide easily together?

What do we call the place where two plates slide against one another?