Earthquakes

Question: How Can We Show What Makes The Earth's Crust Quake?

Prior knowledge questions to ask your students:
What is an earthquake? What causes the crust to move?

Materials:
3x5 inch self- stick note, small plastic cup, and water

Directions/Procedures:

1. Stick the self-stick note to a table. Make sure that 1 inch of the short side is hanging over the edge of the table. Make sure the self-stick note is firmly stuck in place.
2. Fill the cup ¼ full with water.
3. Place the cup on the center part of the self-stick note that is on the table.
4. Carefully and firmly pull the self-stick note straight out from under the cup.

What Happened?:
The sticky part of the note stopped you from easily pulling it all the way out, and when it released you were pulling with enough force to move the note quickly, thus causing the water to vibrate. The sticky part of the note acted as two plates sticking together and then moving past each other causing the Earth's crust to vibrate. The glass sticking to the sticky note showed how two plates sticking together and then moving past each other would make the Earth's crust quake.

Journaling Suggestions:
What makes plates stick together until there is enough force to move them? How would earthquakes be different if plates did not stick together?