**Milky Way Plate Tectonics**

**You may NOT eat your Milky Way until the end of the activity when Mrs. Trolinger says it is ok! This is your learning tool for today.**

Your Milky Way is going to represent the layers of the Earth. The chocolate is the crust. The caramel is the mantle, and the nougat is the core.

1. Unwrap your candy. Holding the bar from both ends with two hands, gently push up in the middle to “bend” the bar. Do not separate the two halves. Which layer cracked? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. When the top layer cracks, this makes a “hole” to fill in. Which layer would most likely fill that hole? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. If you were to continue to pull the ends apart and the hole filled, what type of boundary would you have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Holding the bar with both hands, gently return it to its original “flat” position. Now, hold your fingers on the edges of the bar as you gently push the ends together. Observe the top layer. Convergence is when plates collide and are pushed up to form mountains. Subduction is when one plate dives under another plate. Which type of boundary did your model create? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Return your Milky Way to the starting position as closely as you can. Now, hold one end of the bar in each hand. Slowly push one end away from you as you pull the other end toward you. What type of boundary have you created? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Why would this movement be likely to cause earthquakes? \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Once you have completed all of the questions above, you may eat your Milky Way.