**Topographic Maps with Play Dough Mountains**

**DIRECTIONS:**

1. **Knead your play dough, and make it into a mountain shape. You can have a single, pointy peak, a flat, or round top. Try to make your mountain at least three inches high at the highest point.**
2. **Fold a sheet of paper in half lengthwise, then fold it again widthwise. Unfold the paper, and trace the lines you made in the paper. Label the lines the point of the compass: North, South, East, West.**
3. **Place your dough mountain on the center of the piece of paper, where the lines cross. Where the outer edge of the dough meets the paper, the elevation is 0 inches. Use the pencil to trace the outline of your dough.**
4. **Using the toothpick, carve a shallow, vertical (straight up and down) line on the clay, from the tip of the peak to the place where the bottom of your mountain meets the line marked South. This will be your first guideline. Carve a second line from the top of the peak down to the East line.**
5. **Tie one end of the dental floss around your ruler, at the 1-inch mark tape the string in place so it doesn’t wiggle. Tape the other end of the dental floss to your pencil.**
6. **Keeping the short ends of the ruler and pencil flat on the table, pull the string so that it slices through the play dough. Put your fingers on the back edge of the dough as you slice front to back, to keep the dough from moving. You will be slicing your mountain into two sections: the bottom inch of your mountain, which is touching the paper, and the top part of your mountain, which is the part higher than one inch.**
7. **Carefully separate the two sections of dough. Move the bottom section off of the first paper and onto the second paper.**
8. **Using your guidelines, put the smaller, top piece of dough back on the paper. Make sure both guidelines on the dough match up to the guidelines on the paper.**
9. **Now trace this section of dough with the pencil. Write 1” next to this line. All of the dough at this line started out one inch above the paper.**

1. **Repeat steps 5 through 8 until you have reached the top of your mountain. Make sure to label your second cut 2”, your third cut 3” and so on.**