How To Build a Baking Soda MINI-Volcano

Okay, the baking soda volcano is the kitchen equivalent of a volcano, not a real one. It's cool all the same! The baking soda volcano is also more or less non-toxic, which adds to its appeal.

**Difficulty: Average**

**Time Required: 30 minutes**

**Here's How:**

1. Mix 6 cups flour, 2 cups salt, 4 tablespoons cooking oil, and 2 cups of water in bowl. The resulting mixture should be smooth and firm like a pizza dough (more water may be added if needed in class).

2. Stand the plastic water or soda bottle on the plate and mold the dough around it into a volcano shape. Don't cover the hole or drop dough into it.

3. Decorate your volcano with brown paint...add sand to it when wet.

4. Melt red and green and red candle wax on the volcano to make the lava look real.

5. Fill the bottle most of the way full with warm water and a bit of red food color (can be done before sculpting if you don't take so long that the water gets cold).

6. Add 6 drops of detergent to the bottle contents.

7. Add 2 tablespoons baking soda to the liquid.

8. Slowly pour vinegar into the bottle. Watch out - eruption time!

**Tips:**

1. The cool red lava is the result of a chemical reaction between the baking soda and vinegar.
2. In this reaction, carbon dioxide gas is produced, which is also present in real volcanoes.
3. As the carbon dioxide gas is produced, pressure builds up inside the plastic bottle, until the gas bubbles (thanks to the detergent) out of the 'volcano'.
4. Adding a bit of food coloring will result in red-orange lava! Orange seems to work the best. Add some red, yellow, and even purple, for a bright display.

**What You Need:**

- 6 cups flour
- 2 cups salt
- 4 tablespoons cooking oil
- Red candle (decoration)
- Green candle (decoration)
- Sand (decoration)
- Brown or Black paint (decoration)
- Styrofoam or plastic plate
- 2 Table spoon of baking soda
- Vinegar
- Dishwashing detergent
- Food coloring
Instructions

• Step # 1 Will be done at home.

• Students will bring in the dough in a ziplock for the following date:_________

• Steps #2 and #3 Will be done in art class.

• Steps #4 to #8 Will be done in science class.