

Lemon Volcano

Materials:

- Lemons (limes and grapefruits work too – you could even compare them)
- Baking Soda
- Food Coloring
- Dish Soap
- Craft Stick
- Plate, tray, or bowl



Procedure:

1. First, place half of a lemon into a bowl or plate that will catch the mess when it erupts. You can juice the other half of the lemon to add to the erupting lemon volcano which you will read about below. Or you can set up two at a time!
2. Next, take your craft stick and poke holes in the various sections of the lemon. This will help the reaction along a bit in the beginning.
3. Now, place drops of food coloring around the different sections on the top of the lemon. Alternating with different colors of food coloring will give a fun effect.
4. Next, pour some dish soap all over the top of the lemon. What does dish soap do? Adding dish soap to a reaction like this will also produce a bit of foam and bubbles!
5. Now, sprinkle a generous amount of baking soda onto the top of the lemon. Then use a craft stick to press some of the baking soda down into the different sections of the lemon to get the eruption going. You can also use extra lemon juice dropped on top to make the eruption bigger.

How is our lemon volcano erupting? A chemical reaction! The citric acid from the lemon juice is reacting to the base of the baking soda creating a gas called carbon dioxide. This reaction causes the bubbling and fizzing you see.