



The Explosive Truth!

A Home Volcano Experiment

Supplies:

1 lemon (or more!), baking soda, orange or red food coloring, dish soap (optional), plate, popsicle sticks

Supplies:

1 Roll of mint Mentos candy, clear 2-liter bottle of Diet Coke, piece of paper that can be rolled into a tube to load the mentos, 1 index card

How to Create Your Shield Volcano

1. Have an adult cut the lemon in half and cut the bottom off so it is stable, save the other half for later
2. Use your popsicle stick to break up the inside of the lemon
3. Add a couple drops of orange or red food coloring
4. (optional) pour some dish soap on top of the lemon
5. Pour a generous amount of baking soda on top of the lemon
6. Use the popsicle stick to press some of the baking soda into the sections of the lemon
7. Wait a few minutes to see the volcano start to erupt. You can also use the popsicle stick to mash the baking soda and lemon around more

How to Start Your Composite Volcano:

1. Go outside where things can get messy!
2. Open the bottle of soda slowly and place it on the ground on a flat surface so it does not tip over
3. Unwrap the roll of mentos and load them into the rolled paper tube
4. Put the index card on top of the tube loader and turn it upsidedown
5. Place the index card on the top of the bottle, making sure the candies are lined up with the mouth of the bottle
6. Remove the index card and let candies fall in and immediately step away from the soda bottle
7. Observe your volcanic eruption!

OBSERVATIONS

**Shield Volcano
(Lemon)**

**Composite Volcano
(Soda)**

Which volcano do you think will erupt the fastest?

Which volcano do you think will erupt the longest?

How long did the volcano take to start erupting?

Describe the eruption

How long did the eruption last?

Which volcano had more pressure and gas build-up?

Which volcano do you think gave more warning and eruption was about to happen?

Which type of volcano is common in Hawai'i?



Based on your results what are some characteristics of Shield and Composite Volcanoes?