

Exploding Lava

Have you ever wanted to see a volcanic eruption up close? With just a few simple ingredients we can create a chemical reaction that will look like lava exploding out of a volcano.

What you need:

- An empty, clear water bottle (16 oz. or larger)
- Water
- 2 drops of food coloring (It has to be liquid, not gel. You can mix colors if you want.)
- Cooking oil (Approximately 2 Tablespoons)
- Alka-Seltzer tablets (3-4 tablets)

What you do:

Step 1: This experiment can get messy! You may want to place the bottle in a plastic bin, cover a table with a plastic tablecloth, or do the experiment outside for easy clean up.

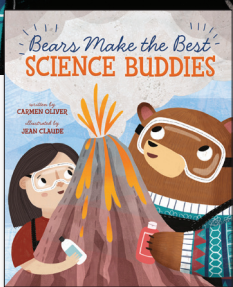
Step 2 (make a hypothesis): Predict what you think will happen. Will the water stay in the bottle? Will it bubble over top and explode?

Step 3 (experiment): Fill up the water bottle 1/4 of the way and add 2 drops of food coloring. Mix together. Top with cooking oil. Add the Alka-Seltzer tablets. You can play around with how many you want to use.

Step 4 (analyze results): Make an observation. What happened when you added the Alka-Seltzer tablets? Did something different happen depending on how many tablets you added?

You may be wondering what made this explosion happen. Antacids like Alka-Seltzer contain sodium bicarbonate, also known as baking soda and citric acid. Together these chemicals react and create carbonic acid. When carbonic acid is exposed to water it decomposes to carbon dioxide. The fizz that you saw exploding out of the bottle is carbon dioxide bubbling to the surface.

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