

## ERUPTING SODAS

This Mentos and soda experiment is a great example of a physical reaction!

### INSTRUCTIONS:

**STEP 1:** Prepare the candy by removing them from their sleeves and placing in separate cups.

**STEP 2:** Pour equal amounts of the same soda into two other cups.

**STEP 3:** Drop each group of candy into the cups, at the same time.

**STEP 4:** Analyze to see which variety of Mentos creates the most foam. Was there any difference?

### THE SCIENCE

You might be surprised to know that the Mentos and coke eruption is actually a physical reaction. It's not a chemical reaction like how baking soda reacts with vinegar and a new substance, carbon dioxide is formed. So how does it work instead?

Inside the coke or soda, there is dissolved carbon dioxide gas which makes the soda taste fizzy when you drink it. Normally, you can find these gas bubbles coming out of the soda on the sides of the bottle, which is why it becomes flat after a while. Adding Mentos speeds up this process because more bubbles form on the surface of the Mentos than on the side of the bottle and push the liquid up. This is an example of a change of state of matter, the carbon dioxide dissolved in the Coke moves to a gaseous state.

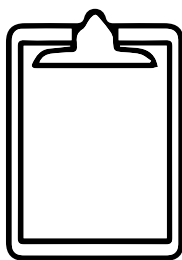
### SUPPLIES

Mentos mint candy  
Mentos fruity candy  
2 bottles diet soda  
Party cups



# Erupting Soda Observations

Use this worksheet to process and evaluate your work.



RECORD

What happened when you added the candy to the soda?

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What is special about the candy that makes it erupt?

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Is this a physical or chemical reaction?

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Would this work with water? Try it to find out!

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