

# BUDDY BISON'S BAKING SODA GEYSER

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NPS/Jim Peaco

## What is a Geyser?

When magma (hot fluid within or below the Earth's crust) heats water underground, it can erupt out of a crack in the Earth's surface. This spout of hot water and steam is called a **geyser**. Yellowstone contains half of the world's known geysers, with eruptions happening daily.

## SUPPLIES

- 2 tsp dish soap
- 1/4 cup cold water
- 1 1/2 cups white vinegar
- Baking soda slurry  
(1/2 cup baking soda mixed with 1/2 cup water)
- Empty 2-liter soda bottle



## DIRECTIONS

THIS WILL BE MESSY! We recommend doing this outside.

1. Combine the dish soap, water, and vinegar in the soda bottle.
2. Pour the baking soda slurry into the bottle and quickly move back. It's geyser time!

HOW IT WORKS: When baking soda and vinegar mix, they create carbon dioxide gas through a chemical reaction. This gas expands rapidly, making bubbles that fill up the bottle, causing our mini "eruption"!

EXTENSION: Try using different amounts of all the ingredients, and see how that affects your geyser.

