

# Mentos Geyser!

(Information from page124 of the CSLP Manual and [stevespanglerscience.com](http://stevespanglerscience.com))

## Materials needed for each eruption:

- 1 two-liter bottle of diet soda (Diet Coke is recommended)
- 1 roll of Mentos mint candy
- 1 piece of paper, 11" x 17"

## What you do:

1. Remove the cap from the soda bottle.
2. Unwrap the candy completely.
3. Wrap the piece of paper around the candy, creating a roll that is 17 inches long. All of the candy should be inside the roll. Make sure they won't move until you release them.
4. Hold the roll of candy over the soda bottle, inserting one end of the paper into the top of the bottle.
5. Ask the group to count down with you from ten to one.
6. At "one," release the candy and run away from the soda bottle as quickly as possible. The soda will shoot up into the air like a geyser.



## Explanation:

Soda is a carbonated beverage, meaning that it contains carbon dioxide, which makes the liquid bubbly. Gas typically takes up space, but soda is bottled under high pressure, forcing the bubbles to remain suspended in the liquid rather than allowing them to expand and make additional bubbles. Imagine opening a bottle of soda under normal conditions. A "fizz" or "whoosh" is heard as the gas moves from inside the soda to outside of the bottle, where pressure is low. Dropping Mentos into the soda gives the carbon dioxide surfaces to react with, creating an extreme result. More details on this project can be found at this website: [www.stevespanglerscience.com/experiment/originalmentos-diet-coke-geyser](http://www.stevespanglerscience.com/experiment/originalmentos-diet-coke-geyser).

For an added challenge, try the experiment again with fruit Mentos. Does the reaction differ? How?

## More information and helpful hints:

- This activity works well for kids or teens. If you do the experiment with teens, they can help with pouring the Mentos in the soda.
- Create a measuring device to record the height of the geyser.
- Repeat the experiment using different brands of soda and different flavors of Mentos to see if the reaction is different.
- Steve Spangler sells a "Geyser Tube" for \$4.99 to make dropping the Mentos in the soda even easier.
- The kids can taste the Mentos and soda left in the bottle after the eruption.

# Explore the night sky with a Star Lab!

- A Star Lab is an inflatable planetarium
- It is quite large, so you need an large indoor space to accommodate it
- It can hold about 25 people at a time
- You must go through a free training to operate the Star Lab
- There are two Star Labs available for rent in the Treasure Valley:
  - Discovery Center of Idaho
    - Cost: \$100 weekly, \$40 daily
    - Website: <http://www.dcidaho.org/Educate/Outreach.php>
  - College of Idaho
    - Cost: \$100 for one day, \$150 for up to 2 weeks
    - For more information, contact Amy Truksa at 459-5130
    - Website: <http://www.collegeofidaho.edu/about/arts-culture/whittenberger-planetarium/starlab-rental>



- The Twin Falls Public Library and the Jerome Public Library have held a Star Lab program for the last two years. In Twin Falls, we have done the program two different ways:
  - We held Star Lab showings every half hour from 10am to 1pm. Patrons received “tickets” for a specific showing.
  - We advertised that the Star Lab would be presenting shows every half hour from 10am to 1pm, and patrons trickled in throughout the morning.
  - There are a variety of crafts and activities patrons can do while they wait for their turn in the Star Lab.

