

Diet Coke and Mentos Experiment

Explore the eruption of carbon dioxide when the candy Mentos dissolves in Diet Coke

MATERIALS NEEDED:

- *Mentos mint candy
- *Diet cola
- *A variety of containers with varying sized opening
- *A narrow test tube wide enough to fit the candy [Klutz and others make a delivery contraption that is easier.]
- *Logbook to write your results

EXPERIMENT PROCESS:

- *Stack the Mentos candies (approximately half a roll) in the test tube.
- *Cover the opening of the test tube with an index card or similar slim, small paper.
- *Invert the test tube, holding the cover in place.
- *Place the soda bottle outside in an area that can get dirty and messy.
- *Open the soda and place the index card over the bottle opening.
- *Pull the index card away swiftly, dropping the candies into the soda.

Be prepared: the eruption happens quickly, so back up fast!

- *Observe the eruption—container, height, trajectory, duration, description.
- *Record your observations in a logbook.
- *Repeat the process, varying the opening that the soda erupts from. For example, cut the bottle top to increase the diameter an inch or more. Alternatively, dispense the soda into a vase or pitcher. Or, attach plastic piping or tubing to extend the opening's neck.
- *Each time you change bottle opening size, write the diameters for each eruption.
- *Observe each eruption, recording the details and compare the results.

The experiment should work with any carbonated soda drink. Try an alternate experiment using various types of sodas and bottle opening sizes.

When you have completed enough experiments, you can take the information from the journal and create a chart.

