

Food Explosions

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Purpose:

- ★ Introduce students to chemistry in a fun way by showing them chemical reactions created by everyday items

Materials:

- 1 Bottles of regular sized Diet Coke
- 1 large bottle of Diet Coke
- 1 Empty clean bottle
- 3 Balloons
- Vinegar
- Baking soda
- 2 roll of mint Mentos
- Funnel

Procedure/Task:

Part 1: Vinegar and Baking Soda

1. Pour in a few inches of vinegar into the empty bottle.
2. Use the funnel to fill the balloon half full with baking soda.
3. Stretch the mouth of the balloon over the mouth of the bottle and dump the baking soda in the balloon into the bottle, leaving the balloon still stretched over the bottle.
4. Tell students to make observations about what is happening.
5. Explain to students that the baking soda reacts with vinegar to make carbon dioxide.

Part 2: Diet Coke and Mentos

1. Pour out half of the Diet Coke from another bottle of soda.
2. Put 2 mentos into a balloon.
3. Stretch the mouth of a balloon over the mouth of the bottle and dump the mentos into the Diet Coke, leaving the balloon still stretched over the bottle.
4. Tell students to make observations to this experiment and why the reaction is happening..
5. Ask students which balloon inflated the most (should be the vinegar and baking soda).

Part 3: Diet Coke and Mentos without balloon

1. Ask students what they think will happen if there was no balloon over each bottle.

2. Lead students outside to an open space, such as the playground or the field to demonstrate what happens if a large amount of Mentos were poured into a lot of Diet Coke. Make sure kids are positioned far away from where you will perform the experiment.
3. Open the large bottle of Diet Coke, and pour 1 roll of Mentos into the Diet Coke as fast as possible.
4. Back away from the Diet Coke and watch as the reaction causes the Diet Coke to shoot out of the bottle.
5. Ask the students why they think this happens, and any comments they have on the lesson.
6. As a reward for being good students, pass out 1 pack of pop rocks to each student.