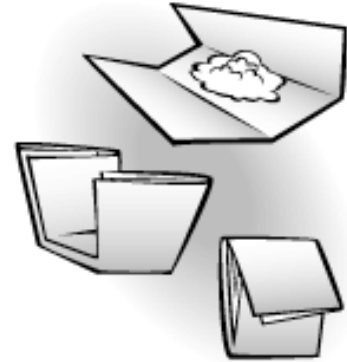
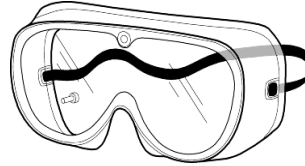




# Baking Soda “Poppers”

**Supplies:**

- Vinegar; Baking Soda
- 1 snack size zipper seal bag
- 1 square of toilet paper or tissue
- Liquid measuring cup
- Measuring spoons
- Safety goggles



**Age or Grade:**

All Ages

**Time:**

30 Minutes

**Background:**

Baking soda, or sodium bicarbonate is a baking ingredient that is activated by a liquid and acid. The chemical reaction of baking soda and an acid produces carbon dioxide in the form of bubbles. These bubbles form air pockets allowing batters and doughs to rise.

**Project Goal:**

Discover how a chemical reaction can cause batter to rise using baking soda

**What to Do:**

1. Put on your safety goggles and step outside (if it's a rainy day, do this activity in your bathtub, shower or sink).
2. Place 1 tsp of baking soda in the middle of a square of toilet paper or tissue.
3. Wrap up the baking soda in the tissue by folding the tissue several times and place in the zipper seal bag.
4. Partially seal the bag, leaving about one inch open.
5. Pour  $\frac{1}{4}$  cup of vinegar into the bag and seal it completely, as quickly as you can.
6. Give the bag a quick shake and gently toss onto the ground.
7. Wait for the contents to foam, then the bag to expand, then pop!
8. Pick up the bag and dispose of it or dry it out and try again — Don't leave any trash outside!

**Reflect:**

1. What is the advantage of using a chemical reaction to cause your batter to rise rather than using yeast?
2. If you did not have vinegar, what other types of acid (sour foods or liquids) could you use to get a similar reaction?

**Apply:**

Can you think of a recipe that uses baking soda and an acid?

**Going Further:**

Try other acidic liquids such as lemon juice or butter milk. Go to <https://www.ice.edu/blog/what-irish-soda-bread> to learn how to make Irish Soda Bread with your family!

