

# Exploding Lunch Bag Experiment

## WHY DOES VINEGAR AND BAKING SODA EXPLODE?

The chemical reaction between the baking soda and the vinegar creates a gas called carbon dioxide.

The carbon dioxide gas then fills up the bag. If there is more gas than room available in the bag, the bag will burst, pop, or explode.

## YOU WILL NEED:

- Baking Soda
- Vinegar
- Small sandwich bags or Gallon Size Bags
- Toilet paper
- Tablespoon Measure and 2/3 Cup Measure
- Safety Goggle or Sunglasses (always be safe)!



## HOW TO SET UP POPPING BAGS

To get started with your bursting bags outdoor science project, you want to create a toilet paper pouch for the baking soda. This slows down the chemical reaction between the vinegar and baking soda. It is all about the anticipation!

### Step 1:

Take one square of toilet paper and place a heaped tablespoon of baking soda in the middle.



### Step 2:

Bring the corners of the toilet paper together and wind up the top to create a simple pouch.



### Step 3:

Add 2/3 cup of vinegar to your plastic bag.

### Step 4:

Seal the bag so there is just enough room to slip in the pouch.

### Step 5:

Give the bag a little shake and toss on the ground.

Watch and see what happens with your exploding bag. Will it pop, burp, explode?

