

The Exploding Sandwich Bag!

Next time you're getting ready to make your lunch, you can dive into a superfun science experiment! This one involves an explosion (only a little one!) and is a great way to learn about chemical reactions too!

What do I need:

- White vinegar
- Bicarbonate of soda or baking soda
- Tissue paper
- A sealable sandwich bag

How do I do it?

STEP 1 - Wrap a couple of teaspoons of bicarbonate of soda up inside a tissue, as shown. (This is just to make it easier to get your sandwich bag closed before your chemical reaction gets started!) **WARNING: Make sure to do this experiment outside! (or somewhere that you don't mind making a mess!)**

STEP 2 - Pour some white vinegar into your sandwich bag until there's around a 3cm layer in the bottom of the bag.

STEP 3 - Pop your bicarbonate of soda package inside your bag and hold it above the vinegar while you seal it up!

STEP 4 - Drop your bicarb down into the vinegar and stand back! Your sandwich bag is getting set to explode! You'll see your bag slowly start to swell up as the pressure builds and then finally...pop!

What's going on?

This is all to do with the pressure being caused by the chemical reaction! As the bicarbonate of soda and the vinegar mix together they react and carbon dioxide is given off. The bag fills with more and more carbon dioxide and soon the pressure will be too much for the bag to take and BOOM! You'll get a beautiful little explosion, perfect!

More Fun Please - Experiment like a real scientist!

- How can you make the bag explode more quickly?
- What happens if you add more vinegar or more bicarbonate of soda?
- What combination produces the biggest explosion?!

