

# An Exploding Fountain

One of the most fun (and messy) experiments ever! Just be sure to do it in plenty of space and find out the science behind it too.

**WARNING! - This Experiment MUST be done Outside!**

## What do I need:

- A 2 litre bottle of fizzy drink (any will do!)
- Mints
- A cardboard toilet roll
- Pen, scissors & sticky tape

## How do I do it?

**STEP 1** - First we need to make a mints dropper!

- Cut the toilet roll (or other card) so it can be rolled round into a tube that's just a bit wider than one of your mints!
- Tape the tube together
- Push a pen/pencil through the tube - that's the firing pin
- Fill the tube from the top with mints (7 is perfect!)

**STEP 2** - Take your dropper (loaded with mints) and lemonade to an outdoor space where you can make a mess.

**STEP 3** - Make sure you're OUTSIDE, have a final check...attach the tube to the bottle and then pull the pen back - This will explode into a messy fountain so quickly get well back!

## What's going on?

The bubbling fountain of lemonade that's (hopefully not) just drenched you is one of the world's most fun experiments. It's also one that's badly explained (even by scientists!).

The lemonade bottle is packed full of carbon dioxide, that's why it starts fizzing as soon as you take the lid off! The bubbles form on tiny scratches and scuffs on the inside of the container known as nucleation points. The lemonade will fizz away for a while and then, once all the carbon dioxide has come out, go flat.

The mints just speed this up - instead of the bubbles coming out over a few hours it all comes out in a few seconds! The surface of a mint is the perfect place for bubbles to form - which is why they are the 'magic' ingredient!

