

# WONDER ZONE CRAFTS AND EXPERIMENTS

Day 1 The Fun of Discovery

## Experiment

### Diet cola and “Mentos” experiment

If you try this experiment at home please make sure that an adult is present and that you conduct the experiment outside.

You will need:

A 2-litre bottle of diet cola at room temperature

A packet of chewy mints (such as Mentos)

A small piece of card

A roll of paper

It's a messy experiment. So make sure you do it outside and that the people who are not doing the experiment stand about 5 metres away.

Set your bottle of diet cola on the ground (you might want to tape it to the surface it's standing on so that it doesn't tip over) and take the top off.

Place 3 chewy mints into the roll of paper.

Cover the end of the roll of paper with the card and place the tube, card end down, directly over the open top of the bottle.

Pull the card away, letting the mints drop into the diet cola. The fizzy pop should quickly foam up and shoot out of the bottle creating a fountain that goes high into the air. You will need to move quickly to avoid being covered in cola!

The scientific explanation

It works because of something called nucleation. The surface of the mint is covered with lots of tiny bumps and these are ideal places for gas bubbles to form. The fact that there are so many nucleation sites and that the mints sink to the bottom means a lot of gas is created in a small area. This causes a massive build-up of pressure which results in the cola fountain!

## Crafts

Choose which activity you would like to do.

### Splash paintings

You will need: a large sheet of paper, poster paints in different colours and clean toothbrushes.

It can be messy so wear an old shirt and cover surrounding surfaces.

Dip the toothbrushes into the paint and flick it so that it sprays on to the paper. It should look like a fountain or explosion.

### Draw or paint a volcano

You can splatter red, orange and yellow paint at the top of the volcano and blow the paint with a straw to represent the lava gushing out of the crater.