

The Mighty Can Experiment

A great fun experiment you can do next time you drink a can of pop! Despite the pictures there's no need to be wearing racing boots when doing this experiment and you can use "full fat" cola cans too, if you feel like it!

What do I need:

- A can of pop
- Pen

How do I do it?

STEP 1 - The first step is to stand on top of the can...

WARNING: It's a very solid idea to be wearing some sensible shoes, as the can may well collapse on you!

NOTE: As the cost of metal has gone up and science has improved the metal that cans are made out of has got thinner and thinner. It just about took my weight but would be perfect for a younger volunteer!

STEP 2 - Have a quick think about how awesome this is! It's amazing that something so thin as a can of pop can take all my weight! (about 80kg, 13 stone-ish!) but not for long!

STEP 3 - For the final step you'll need a friend to help you! Get them to use a pen and "jab" the can in the side about halfway up the can. (Don't use your finger, just in case it gets trapped!) Bam - you just fell straight down to the floor!

What's going on?

It's an incredible bit of engineering to make cans as strong as they are considering they are so thin but they are only strong in one direction. By jabbing the can in the side it causes it to bend in very slightly but that changes how the force is distributed and causes the whole thing to collapse! You can always have another go next time you have a fizzy drink!

More Fun Please - Experiment like a real scientist!

- Does it make a difference if you use different brands of pop?
- What about if you fill the can with water? But leave it open? (do this outside!)

