## The penny in cola experiment

This experiment is disgustingly fun but might just make you think twice the next time you fancy having a taste of a fizzy drink. Let's get started!

## What do I need?

- Some copper coins
- Cola
- Glass
- Blue-Tac
- Patience (not too much needed!)

**STEP1** - Collect some copper coins. The older and dirtier the better!

STEP2 - Pour out a glass of your cola.

STEP3 - Cover one side of each coin with Blu-Tac but leave the other side open.

**STEP4** - Pop your coins into your glass of coke.

**STEP5** - Sit back and wait but you should be able to see a difference in the colour of your coins within about an hour.

## What's going on?

If you put some copper coins in a glass of water for a couple of days would that make them clean?

Nope! So we know that it's something within the cola that's causing the change but what? Well, cola is acidic. It's actually the acid within the cola that's reacting with the rust on the surface of our coins and causing them to return to their original shiny selves. Our cola contains phosphoric acid which is why cola is acidic. The acid reacts with the oxide rusty coating that has covered our coins and returns them back to almost as good as new.

- Does using diet or regular cola make any difference?
- What about testing out different brands of cola?
- Does it have to be cola that we use?
- What about giving vinegar or lemon juice a try?