

## Cornflour slime

Sometimes, science is all about observing things; watching things grow, looking at things under a microscope or looking for stars in the night sky.

Sometimes though, science can be SUPER messy.

To do this experiment, you need to get your hands dirty. Who wouldn't want that?

### Materials:

- Cornflour
- Food colouring
- Water
- Bowl
- Wooden mixing spoon

### What to do:

- In a large bowl measure out a few cups of cornflour. You really don't need to be accurate for now.
- Mix a few drops of your favourite colour in with a jug of water.
- Start adding the coloured water to the cornflour and mix it together with the wooden spoon.
  - Note - you'll probably want to ditch the spoon after a while. Using your hands is better!
- Mix the cornflour with water until all of the cornflour is wet. The consistency you're after is tricky to describe. This slime behaves in a very weird way. When force is applied, it behaves like a solid, but then if you leave it to sit, it turns into a liquid. You can test this by scooping up a bit of the slime, squeezing it in your hand and watching what happens. If it turns into a solid, then a liquid you've got it right!

### Things to do with the slime:

- Play with it. Experiment with its properties. How much force do you need to hit it with to get it to solidify? How long before it starts running through your fingers?
- Make different batches and keep track of the measurements. Can you make the *perfect* slime? Share it with us!

## What's happening:

Fluids are things that *flow* and *take the shape of the container they're in*. These can be liquids or gases because the particles in both of these are far enough apart that they can slide past each other.

Generally, solids don't behave like fluids. Their particles are packed too closely together to slide like a liquid or a gas.

This is where cornflour slime comes in. When it's resting, so when you're not playing with it, it behaves like a fluid but when you hit it with something, it behaves like a solid. That's because the particles of cornflour are hanging around in the water - not mixing with the water but kind of just chilling. So when you move it really fast, the particles don't have time to get out of the way.

We call this a "Non-Newtonian Fluid" which is science-speak for "weird".

