

AT HOME!

PROJECT NO.16

Make Your Own Slime

As family days out are put on hold, we've been thinking how we can make your family days in as much fun as possible.

Eureka! is the UK's only hands-on museum just for children aged 0-11. Full of exhibits to explore, helpful staff to engage with, activities to do and buttons to press. Based in West Yorkshire, we have brought smiles to the faces of over 8 million visitors since 1992. As families can't come to us, we are keen to bring a sample of the Eureka! experience to you.

Our expert staff have come up with a series of experiments that can be done at home, all designed to inspire children to get hands-on, have fun, and learn about themselves and the world around them.

Get experimenting and send us or share your pictures and videos using #EurekaAtHome and we'll share on our social media feeds too.

WE'RE ALL IN THIS TOGETHER!

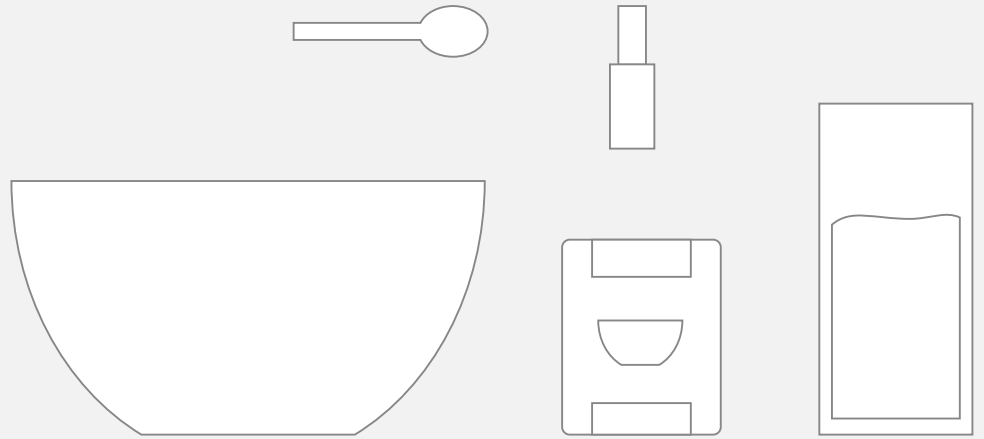


MAKE YOUR OWN SLIME

Everyone loves slime!
This simple recipe can
be made using everyday
cupboard ingredients
and makes a scientifically
interesting substance!

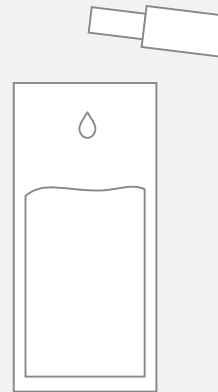
YOU WILL NEED:

- Some food colouring
- A glass of water
- Cornflour
- Bowl
- Spoon



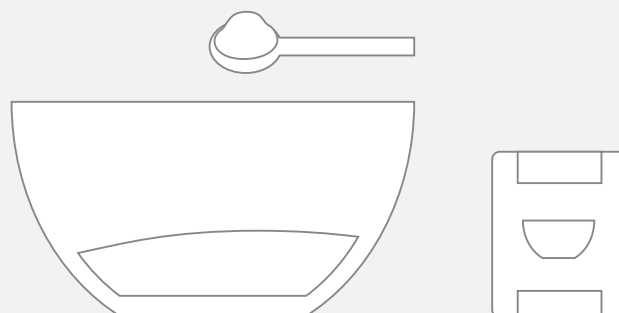
STEP 1:

Put a few drops of food
colouring into your
glass of water



STEP 2:

Tip 3 tablespoons of
cornflour into your bowl

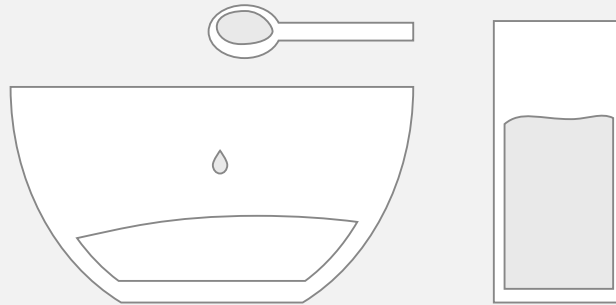


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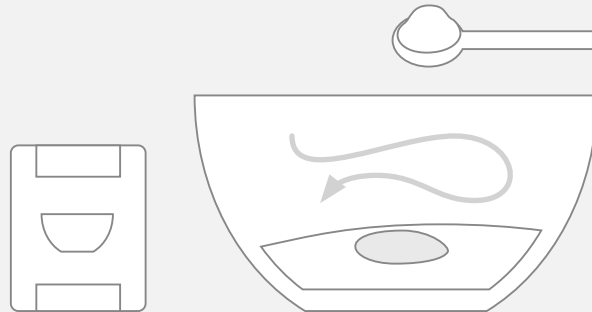
STEP 3:

Pour a small amount (teaspoon) of your coloured water into the bowl with the cornflour



STEP 4:

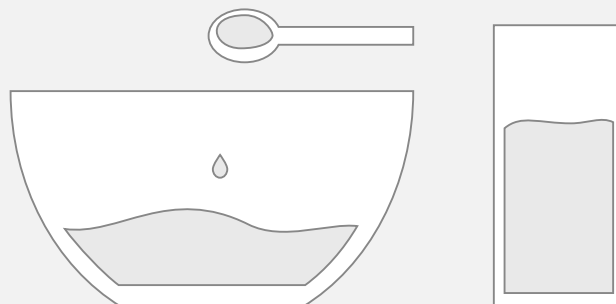
Mix in 2 more tablespoons of cornflour in the bowl



Top Tip:
When mixing it up it works better with your fingers!

STEP 5:

Add slightly more water until the cornflour has dissolved in the mixture



STEP 6:

Try squeezing the mixture - it will start to harden like a solid. As soon as you stop squeezing the mixture it will spread out like a liquid



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Why does this happen?

Some substances sometimes just can't make up their mind whether they're a liquid or a solid!

The cornflour particles are suspended in the water, so it flows like a liquid. But when you apply a force to it, you squeeze the particles and they lock together, acting like a solid. As soon as the force stops, the slime goes back to being runny.

This works because of the particles that are found in cornflour and the way they interact with each other. The cornflour particles are like tiny little rocks bobbing around in the water, very densely packed but not so densely that they're touching each other. As soon as you put pressure on them, they solidify.

Want to know more?

The way that cornflour behaves is similar to sand – it can be loose and then suddenly become compacted by pressure. Have you ever experienced this on the beach when you step on sand?

Can you think of any good uses for this kind of material that solidifies under pressure? Perhaps a bullet-proof vest?

Scientists have only quite recently investigated what was happening at the molecular level of these substances. Check out this BBC report on some experiments done in 2012.

<https://www.bbc.co.uk/news/science-environment-18800017>

