Science Experiments

SUPERSIZE A MARSHMALLOW

Can you really SUPERSIZE a marshmallow? YES YOU CAN!

You will need:

- a marshmallow and a microwave

<u>Step-by-step guide to super-sizing a</u> marshmallow:

- 1. Put a large marshmallow on a plate and ask a grown-up to microwave it for 30-60 seconds.
- 2. You'll see that it grows...and grows... and then goes black inside.



Marshmallows are foamy because they've got loads of tiny air pockets in them. The microwaves heat up the water vapour inside them, making the molecules bounce around more and more, pushing the air pockets outwards. But, eventually, the sugar starts to burn (so they'll taste better after just 30 seconds!). They're super hot when they come out, so be careful!

Homemade slime or goo

Create some epic custard goo! Just like slime but way more fun!



You will need:

1 cup of custard powder, $\frac{1}{2}$ cup of water, large mixing bowl

Steps:

- 1. Pour 1 cup of custard powder into a large mixing bowl then mix in $\frac{1}{2}$ a cup of water.
- 2. Now get in there with your hands-try grabbing a handful, pressing it into a ball and then relaxing your grip.

Hit it, scratch it, stir it - it's crazy! Mixing cornflour (the main ingredient in custard powder) with water makes a non-Newtonian fluid. Without any pressure on it, the cornflour particles flow around suspended in water and the mix acts like a liquid. But put pressure on it and the water is pushed out the way, the cornflour particles pack together and it acts like a solid!