

Super Slime Sensation! Make Your Own Cornflour Slime!

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Have you ever seen something that's both a solid and a liquid? Today's experiment is just that magical! Using common household cornflour and water, you can create a marvellous "liquid". It flows like water when you touch it gently, but when you hit it hard, it resists like a solid. This fascinating substance is called a "non-Newtonian fluid". Let's take a look!

- Age: 6-8
- Time: Less than 1 hours
- Messiness level: Very messy

Materials Needed:

Plate or basin (choose a suitable container based on how much slime you want to make)
Water
Cornflour



Step-by-Step Instructions:

1. Prepare cornflour and water in a 2:1 ratio. For example, if you're using 2 cups of cornflour, you'll need 1 cup of water. Pour the cornflour into the plate and gradually add the water, stirring constantly as you go.



2. If it feels too dry or too wet, add small amounts of water or cornflour as needed until you have a smooth but thick liquid. Take a small handful of the slime and place it in your palm. If it flows like a liquid but hardens like a solid when you squeeze it, your slime is ready.



3. The magic of non-Newtonian fluids doesn't stop there. Try hitting it hard with a hammer and see what happens. Now try gently placing the hammer on the slime. What's different?



4. If you've made enough slime, you can try an even more exciting experiment - stand on it directly! Jump vigorously and feel your feet being supported; then stand still and let your feet be swallowed by the slime.



The Science Behind It:

This is the magic of non-Newtonian fluids! Ordinary liquids, like water, flow regardless of the force applied to them - these are called "Newtonian fluids". But non-Newtonian fluids are different; they exhibit different properties when you apply different forces.

Cornflour slime is a non-Newtonian fluid. When you touch it gently, water molecules can easily slide past the cornflour particles, making the slime flow like a liquid. But when you hit it hard, the cornflour particles are compressed, they can't slide through the water, so the slime behaves like a solid.