

# Making slime - Overview

A fun activity to help introduce polymers is to make slime. While slime might seem like just a simple blob of gooey stuff, it's made up of many tiny parts. These tiny parts are called atoms, and when they link together, those atoms become molecules.

Some molecules are made up of just a few atoms and are special because they can bond to other similar molecules to make a long chain. Scientists call a molecule like this a monomer. And when many monomers join together, they become a polymer.

Imagine you have a paperclip. One paperclip by itself would be a monomer, but if you linked together 1,000 paperclips, they'd become a polymer.

How does this relate to slime?

Slime is made from polymers. Mixing the ingredients for slime together causes a chemical reaction to happen between the molecules of the glue, baking soda, water and saline solution. These molecules get tangled, bonding in new, long chains. That's how slime gets its stretchy, squishy, slimy, goopy texture.

Different combinations of different ingredients make all types of slimes, too. You can have firmer, goopier, stickier or slimier slime, depending on what you put in the mix.



# Making slime - Instructions



Basic ingredients for 1 ball of slime:

- 250ml of PVA glue
- 2 - 3 tablespoons of contact lens solution or saline solution. It is important that the solution contains BORIC ACID
- 1 teaspoon of bicarb/baking soda (1 teaspoon per slime ball)
- bowl or container for mixing

Optional - Other ingredients to make slime of different textures or appearances:

- Shaving foam
- Food colouring
- Glitter

Method for making slime:

1. Pour all of your glue into the plastic bowl. (If you want to add other ingredients, this is the time to do it)
2. Add in one teaspoon of bicarb and mix until any lumps are dissolved.
3. Add in 2 tablespoons of the saline solution and stir slowly. The mixture should begin to harden and start to become stringy.
4. Continue mixing slowly until a ball of slime forms. When you have a clear ball, work the slime with your hands until it becomes smooth. Add another  $\frac{1}{2}$  tablespoon of saline solution if your slime is particularly slimy.

Discussion:

Invite students to handle and play with the slime. As they do, remind them of the millions of bonded molecules they have in their hands. You could pose the following questions:

- Would you describe the slime as a solid or a liquid? Why?
- What might the polymer chains be doing when you pull the slime?
- What might the polymer chains be doing when you squish the slime?
- Can you name some of the physical properties of this polymer? (Is it soft, firm, bouncy, or slippery?)
- Does the feel of this slime remind you anything else you have felt?