

August Experiment: Grow Your Own Crystals!

To support children's scientific learning outside of school, each month I'll be sharing an exciting, hands-on experiment that you can try at home. For August, we're creating our own sparkling crystals using simple materials and a bit of kitchen chemistry! Whether you're after a science project or a shiny decoration, this experiment is a great way to explore solubility and crystal formation.

What You Need:

A clean jar or wide-mouthed container
Skewer or wooden dowel (long enough to rest across the top of the jar)
String or twine
Pipe cleaner (to make your crystal shape)
Kettle or pot for boiling water
Borax or sugar (ask an adult which to use)
Food colouring (optional)



Safety Tip: If using Borax, wear gloves and don't use food containers for mixing.

What To Do:

- 1) Shape your pipe cleaner into a fun design – try a star, heart, or spiral!
- 2) Tie one end of the string to your pipe cleaner and the other end to the skewer. Make sure the shape can hang down into the jar without touching the sides.
- 3) Boil enough water to fill your jar, and carefully pour it in (ask an adult for help).
- 4) Stir in Borax or sugar one spoonful at a time until no more will dissolve. This creates a saturated solution.
- 5) Add a few drops of food colouring if you want coloured crystals!
- 6) Gently lower your pipe cleaner shape into the jar and rest the skewer across the top so it hangs in the liquid.
- 7) Cover the jar and leave it somewhere safe and undisturbed.
- 8) Borax crystals may appear overnight.
- 9) Sugar crystals take a few days to grow.
- 10) Once you're happy with the size, remove your crystals and let them dry.

What's Going On?

This experiment explores solubility and crystallisation.

When we heat water, it can hold more solute (Borax or sugar).

This creates a supersaturated solution – a mix that contains more than usual.

As the solution cools, it can't hold all that solute anymore.

So, crystals begin to form on the pipe cleaner, where they can grow bigger and bigger!

Different materials form crystals in different ways – and your design helps guide the shape they take!

Try Taking It Further:

Compare sugar and Borax crystals – which grows faster?

What happens with different pipe cleaner shapes?

Try making rainbow crystals using different colours.

Can you grow a crystal mobile or ornament?

Note: If using Borax, do not eat or taste the crystals. Always ask an adult for help.

If you have any questions or want to share photos of your sparkly creations, I'd love to see them!
Email me at: newzealand@lainesmeadprimary.co.uk

Happy experimenting!
Mrs Smith