

June Experiment: Magic Milk Potions!

To support children's scientific learning outside of school, each month I'll be sharing a fun, hands-on experiment that families can enjoy at home.

For June, it's time to become potion makers with a colourful experiment that looks like magic – but is really all about science!

What You Need:

Milk (whole milk works best!)

Washing-up liquid

Cotton buds

Food colouring

A shallow plate



What To Do:

- 1) Pour milk onto your plate – just enough to cover the base.
- 2) Add a few drops of food colouring to the milk. Don't stir or mix!
- 3) Try using multiple colours for the most vibrant results.
- 4) Dip the end of a cotton bud into a little washing-up liquid.
- 5) Now gently dip the soapy end of the cotton bud into the milk, close to a drop of food colouring.
- 6) Watch the colour burst and swirl! It's like magic happening right before your eyes.
- 7) Once the colours have burst, gently swirl the cotton bud to create rivers of colour.
- 8) When the colours all mix together and turn brown, simply rinse the plate and start again!

What's Going On?

This experiment uses a clever bit of chemistry to create a magical effect!

Milk contains fats and proteins.

When you add washing-up liquid, it breaks up the fat molecules.

As the fat breaks down, it pushes the food colouring around, creating swirling, colourful patterns!

It's a great way to explore molecular movement and the interaction between liquids.

Try Taking It Further:

Use different colour combinations – how do they mix or clash?

Try different types of milk – semi-skimmed, full-fat, or even milk alternatives.

Does the reaction change?

Try dropping the food colouring in different patterns – dots, lines, or even letters!

Important: Even though this experiment uses milk and food colouring, do not drink the mixture.

If you have any questions or would like to share your magical milk potion photos, I'd love to see them!

Email me at: newzealand@lainesmeadprimary.co.uk

Happy experimenting!

Mrs Smith