

Episode 1: Magical Milk Experiment



In this experiment, Alex uses dish soap, food dye and milk to create some swirly-twirly art. He explores different mixtures and chemical reactions between safe household liquids and solids.

Scientific concept: Creating mixtures and chemical reactions.
Science process skills: Observing, predicting and comparing.
Let's investigate: *Can you create swirling patterns on liquid surfaces?*

Materials

- 2 x shallow trays
- Milk
- Dishwashing liquid
- Food colouring
- Cotton swabs
- Sturdy paper
- Coloured chalk
- Pop sticks



Experiment procedure

1. Fill a shallow tray with water.
2. Scrape coloured chalk dust into the tray. Lay a sheet of paper on top and then lift off to see an interesting pattern! The chalk dust should lift off the surface of the water and stick to the paper.
3. Next, explore how to make swirly patterns from liquid surfaces. Add a few drops of food colouring (use an assortment of colours) to the tray filled with water. Mix the colours by swirling them around with a pop stick. These liquids should mix, but they won't create a swirly pattern.
4. Fill another shallow tray with milk (a thicker liquid than water). Add a few drops of food colouring (green, blue and red). The 'blobs' of food colouring should float on the surface of the milk.
5. Add dishwashing liquid to the milk (a little on the end of a cotton swab) by dabbing the 'blobs' of food colouring to create swirly, twirly patterns.
6. Lay paper on top of the milk liquid and then lift off for a magical milk masterpiece!

Early Education links

Episode themes relate to [EYLF Learning Outcomes](#) 4.2, 5.1, 5.2 and 5.3. Promote learning by encouraging children to use a variety of colours to create varied patterns. Creating mixtures using visual art techniques provides opportunities for children to experiment with ways of expressing ideas through different media.

Follow-up learning

- Explore the Turkish visual arts technique of [Ebru Art](#). These paintings are produced using dyes and a water-based solution to transfer patterns onto paper, fabric and other canvases.
- [Play School Art Time Inspiration Pack for Educators](#) By experimenting with a range of techniques and reflecting on the work of other artists, this resource will inspire teachers to help children make meaning through visual arts.

