

## Colour Changing Milk

This is guaranteed to become one of your favourites. Some very unusual interactions take place when you mix a little milk, food colouring, and a drop of washing up liquid.

1. Pour enough milk in the dinner plate to completely cover the bottom to the depth of about  $\frac{1}{4}$  inch. Allow the milk to settle before moving on to the next step.



2. Add one drop of each of the four colours of food colouring (or as many as you have or can get)—red, yellow, green, and blue—to the milk. Keep the drops close together in the centre of the plate of milk.



3. Find a clean cotton bud. It's important not to stir the mix—just touch it with the tip of the cotton swab. Go ahead and try it.



4. Now place a drop of washing up liquid on the other end of the cotton bud. Place the soapy end of the cotton bud back in the middle of the milk and hold it there for 10 to 15 seconds. Look at that burst of colour!



5. Add another drop of soap to the tip of the cotton swab and try it again. Experiment with placing the cotton swab at different places in the milk. Notice that the colours in the milk continue to move even when the cotton bud is removed.

6. Finally place a sheet of kitchen towel (the thicker the better) over the plate so that it touches the pattern, remove it carefully and put it somewhere to dry – you now have a beautiful picture to keep.

## EXTRA BONUS SHEET

If you are able to, you could experiment with different types of milk, full fat, skimmed, even soya or oat milk, but only if it is easy to do so, you will probably need some help to do this.

If you do make some observations and comments as to what happened...

Type of milk	What happened?

You could take some photos as well.