

Washing up Liquid, food colouring and Milk Experiment



WHAT TO DO!!

- Pour some milk into the dish, enough to cover the bottom of the dish.
- Add a few drops of food dye to the milk (mix and match the colours!)
- Dab the end of the cotton bud into the washing up liquid
- Finally, dip the cotton bud into the milk and watch!

The Science Behind it

Milk contains (amongst other things) fats and proteins. When the washing up liquid comes into contact with the milk it weakens the chemical bonds between the fats, proteins and the rest of the milk.

The soap then attaches to the fat in the milk and this causes the cool patterns that we see! The soap molecules are moving round trying to find fat molecules to attach to. We can see this happening because of the food colouring; the soap and fat molecules bump into the food dye molecules causing them to move around. It will stop when all of the soap is mixed with the milk.