

What you need:

- A bowl
- Cotton swab
- ½ cup of milk
- Food colouring, more than one colour
- Dishwashing liquid
- Pepper (optional)

Instructions:

- Pour the milk into the bowl. Be careful not to move the bowl, you want the milk as still as possible.
- Put one drop of each colour in different places in the milk.
- Put just a tiny amount of soap on the end of the cotton swab, then touch it to one of the colours. WOW!
- Let the experimenting begin!
- To clean up, just pour the milk down the drain. (Do not drink it.)

What happens and why:

Milk has fat in it and the food colouring floats on top of the fat. The fat is all connected with bonds. Think of it like the little pieces of fat all holding hands with each other. Dishwashing liquids are used on greasy or oily dishes because it breaks the bonds in fats, allowing them to separate. When you add the dishwashing liquid to the milk, the fat separates and moves making

Extra Experiments:

1. Does the temperature of the milk have any effect?
2. Try whole milk and skim milk.
3. Sprinkle pepper on the milk before you add the dishwashing liquid, what happens to the pepper?