

The Experiment

Colour Changing Milk

To demonstrate what happens when we mix dish soap, milk and food colouring together. We used:

- milk
- dinner plate
- food colouring
- dishwashing soap
- cotton swabs



Science Factor

The bursting colors is the chemistry of that tiny drop of soap. Dish soap, because of its bipolar characteristics weakens the chemical bonds that hold the proteins and fats in solution. The soap's polar, or hydrophilic (water-loving), end dissolves in water, and its hydrophobic (water-fearing) end attaches to a fat globule in the milk.

Our Discovery

We were so eager to get this experiment started because we wanted to see what happens when we mixed soap, with the milk and food colouring and what a surprise we got!

What We Did:

First we added the milk in the dinner plate and added a few drops of colours in the plate. We dipped the cotton bud into the dishwashing liquid and touched it against the purple food colouring. The purple food colouring quickly spread out into the milk, moving away from the cotton bud dipped in the soap.

Once again, we did this for each of the colours. As the cotton bud touch each of the colours it quickly spread out, making a unique pattern of design.

We did this again, this time adding the food colouring in the middle of the milk. As we touched the cotton bud, all the colours exploded together in the milk. The longer we held the cotton bud the more patterns and designs the colours made! It was really beautiful!

