

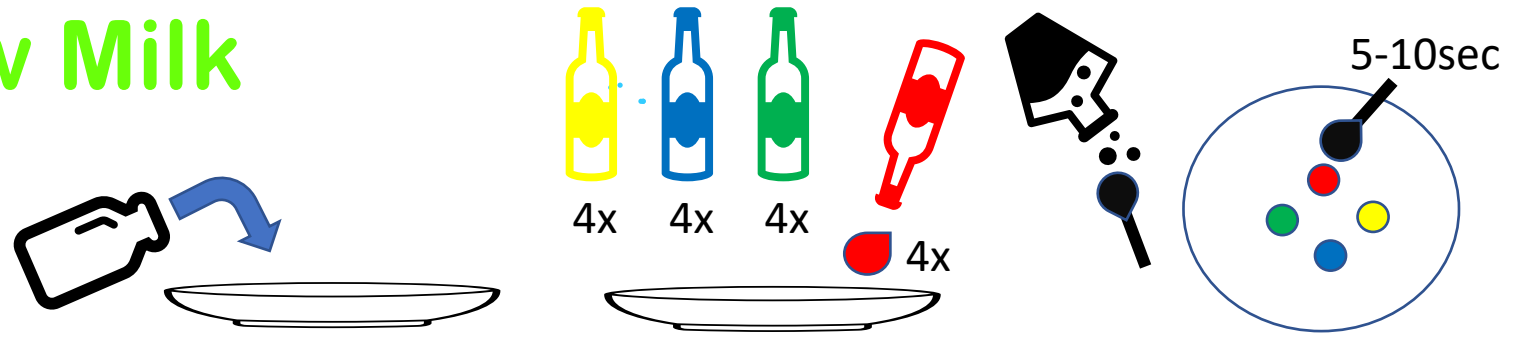
Rainbow Milk

What you need:

- Washing up liquid
- Saucer
- Full fat milk
- Liquid food colouring
- Cotton bud

What you do:

- Pour a thin layer of milk on to a saucer and count to 10 to let milk settle.
- Add four drops of food colouring near the centre of the milk – use different colours.
- Wet the end of a cotton bud with washing up liquid (not too much).
- Put the cotton bud in the milk, keep it still and press down on one colour spot for 5 to 10 seconds (count out loud).
- What happens?
- Move to another area of the milk and put the cotton bud in again.



The Science

The secret is in how the fat in the milk and the washing up liquid interact. The washing up liquid molecules try to align up with and bind to the fat and protein molecules in the milk hooking onto this fat. The washing up liquid breaks down the surface tension on the milk and binds to the fat or protein molecules within it. These in turn try to escape ‘binding’ moving away from the washing up liquid which causes agitation and the milk starts to move away from the cotton bud taking the food colouring with it.

