

# KS2 TUESDAY

## MAGIC MILK

#SurreyWPOatHome



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PARTICIPATION  
AND OUTREACH

## WHAT IS CHEMISTRY?

Chemistry is a type of science which looks at what happens when certain materials are put together. A chemical reaction occurs when two or more materials react to each other. This leads to a permanent change in state (e.g. liquid to solid) or a change in colour or a change in temperature.



# WHERE IS CHEMISTRY IN EVERYDAY LIFE?

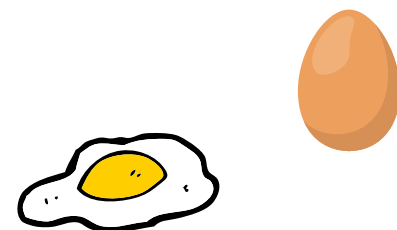
Chemical reactions are all around us and happen everyday. Here are a few examples:

Boiling an egg – a raw egg looks completely different to a cooked one.

Cooking a cake – before the cake mixture goes into the oven it is very runny (a liquid), when it is cooked it's a solid

Fireworks – the explosion and bang of a firework comes from a chemical reaction.

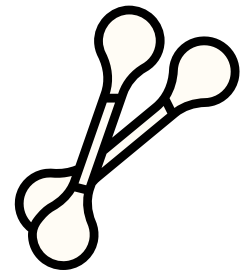
Can you think of any more?



# LET'S PUT IT TO THE TEST

You will need:

- Semi-skinned/full fat milk
- Washing up liquid
- Cotton bud/toothpick
- Food colouring – your choice of colours



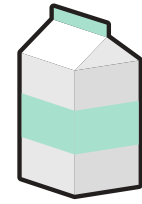
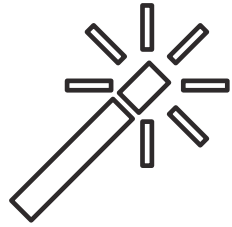
## LET'S PUT IT TO THE TEST

Cover a shallow dish with milk and add in 3–4 drops of food colouring. Dip the end of the cotton bud in washing up liquid and touch the surface of the milk (do not stir).

What happens?  
Can you have a guess why?



Don't worry if yours  
doesn't look like  
this, not all  
experiments will  
look the same.  
That's the nature of  
science!



## WHY DOES THAT HAPPEN?

Milk is made up of mostly water but also contains some fat particles. When the washing up liquid is added to the milk, the fat want to join onto the soap. As the fat particles move towards the soap, the rest of the milk (along with the food colouring) move out of the way.



Remember to send us photos of your magic milk!