

## Moon Cake Science



Making a moon cake is more than just fun.

There are many opportunities for scientific discussions while making a moon cake.

Encourage children to observe, ask questions, make predictions and offer explanations.

While many of the changes are relevant to chemical science, it is not necessary to explain the science in depth at this stage. It's best to encourage curiosity and wonder, create connections with what children already know, and perhaps spark suggestions for further investigation.

- **States of matter: solid and liquid**

**The dry ingredients are solids.**

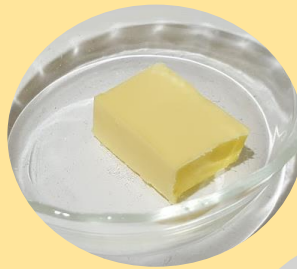
- Flour
- Sugar
- Cocoa powder
- Bi-carbonate of soda
- Marshmallows

**The wet ingredients are liquids.**

- Milk
- Vinegar
- Vanilla



Look through a magnifying glass to see the individual solids in each of the dry ingredients.



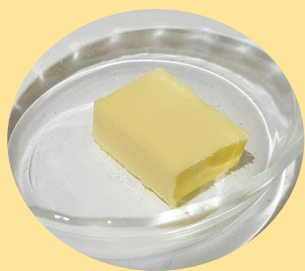
What about butter:  
solid or liquid?



- **What happens when we mix the dry ingredients?**



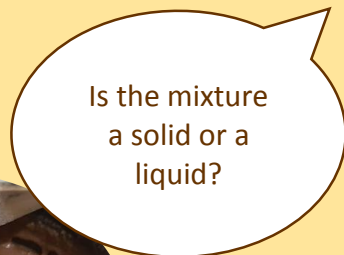
- What happens when we add heat to butter?



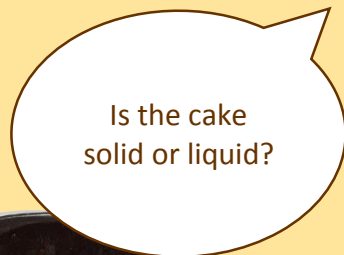
- What happens when the vinegar is added to the bi-carbonate of soda?



- What happens to the dry ingredients when we mix in the liquids?



- What happens when we heat the cake mixture?



- What happens to the marshmallows when they are heated?



- Do all things melt when heat is added?

*Some solids turn to liquid (melt) when heat is added. What other solids melt when heat is added?  
(chocolate, ice cream, ice, plastic, glass)*

*Some liquids turn to solids (solidify) when heat is added. What other liquids solidify when heat is added?  
(egg)*

*Other liquids turn to solids (solidify) when heat is removed. What liquids solidify when heat is removed?  
(water, chocolate)*

- What else did you observe when making the moon cake?



Now do the maths for sharing!  
Enjoy!