

Milk shapes



Demonstrate how milk curdles into curds and whey. Then use the solid curds as a mouldable plastic to create fun shapes and models.

Show

1. Heat up a cup of whole milk in the microwave until it is warm, but not boiling.

2. Pour the warm milk into a bowl.

3. Add two tablespoons of white vinegar to the warm milk and stir it for 30 seconds. You will see blobs of solid forming in the mixture. These are called curds.

4. Pour the milk and vinegar mixture through a sieve.

5. Transfer the solid curds to a piece of kitchen roll.

6. Use your hands to squash the curds together, squeezing out any liquid. Blot with more kitchen roll if needed.

7. Mould the plastic-like material into a shape, possibly using cookie cutters, then leave to harden.

*Glitter and food colouring can be added to the soft plastic before moulding.

Resources

- ☐ Whole milk
- ☐ White vinegar
- ☐ Access to a microwave
- ☐ Cup
- ☐ Tablespoon
- ☐ Bowl
- ☐ Sieve
- ☐ Kitchen roll
- ☐ Cookie cutters (optional)
- ☐ Glitter and food colouring (optional)

Explain

Some material's properties or states change when they are squashed, heated, cooled or mixed with other materials. Some of these changes are reversible whilst others are irreversible.

Suggest

- Does the same thing happen with cold milk?
- How do you make hard pasta bendy?
- What happens if you mix oil and water?