

Science - Mixtures Year 4 - Autumn 2



Key Vocabulary

Solid	Materials that keep their shape unless a force is applied to them. They can be hard, soft or even squashy.
Liquid	Liquids take the shape of the container. This can flow or be poured.
Mixture	A substance made by mixing 2 or more things together
Dissolve	To break up into a liquid and form a solution
Soluble	Able to be dissolved in water
Insoluble	Not able to be dissolved in water
Solution	A mixture of liquid and a dissolved substance
Reversible changes	A change that can be undone or reversed
Irreversible changes	A change that can not be changed back or undone

Reversible	Irreversible
✓ States of matter	✗ Burning
✓ Solid + Liquid	✗ Rusted metals
✓ Solid + Solid	✗ Heating food
✓ Soluble solid + Liquid	✗ Mixed ingredients



Dr Pearl Agyakwa
(Materials scientist)



Sir Brian Smith -
Chemist

Possible careers: scientist

What key knowledge will I have by the end of this unit?

- A mixture is when you put 2 or more materials together.
- When you create a mixture and the materials remain present, the mixture can be separated. This is reversible.
- A material is dissolved if you cannot see any of the bits and you can see through the liquid.
- A material dissolved in water (or another liquid) creates a solution.

What key skills will I have by the end of this unit?

- Understand that predictions are not always correct
- Compare objects based on obvious observable features e.g. size, colour shape, texture
- Can take accurate measurements using standard units using a range of equipment
- Record data in simple pre-prepared tables
- Understand and follow simple safety rules
- Identify possible hazards in an investigation setup by someone else
- Know what to do in the case of a minor accident or spill

In KS1:	In Year 3:	In Year 4:	In Year 5:	In Year 6
<ul style="list-style-type: none"> • Identify, name and describe different materials • Compare and group them according to their properties 	<ul style="list-style-type: none"> • Investigate properties of materials - flexibility, absorbency 	<ul style="list-style-type: none"> • Investigating the properties of solids, liquids and gases 		<ul style="list-style-type: none"> • Make changes to materials • Investigate solids, liquids and gases