




Science	States of Matter	Ruby Class	Autumn Term 2 2021
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Key Knowledge

Types of Materials

Solids 	Stays the same shape Can be held in your hands Can be cut into a new shape Examples - wood, metal, rock, ice
Liquids 	Flows and can be poured Changes shape to its container Volume never changes Examples - water, juice, oil
Gases 	Often invisible Always fills its container Shape & volume change Examples - oxygen, hydrogen, carbon dioxide
What does changes of state mean?	When a material changes from one material type to another, we say 'it has changed state.'

Key Vocabulary

Word	Definition
Temperature	How hot or cold something is. Measured in degrees Celsius.
Celsius	The common scale in the UK for measuring temperature.
Particle	A tiny amount of something. You can't see them with your eyes!
Melting	The process of a solid heating and changing into a liquid.
Evaporation	The process of a liquid heating and changing into a gas.
Condensation	The process of a gas cooling and changing into a liquid.
Freezing	The process of a liquid cooling and changing into a solid.
Precipitation	When water or snow fall from a cloud
Boiling	To become so hot (100°C) that water bubbles and then turns into a gas.

Changes of State

Solid to Liquid	A solid melts and changes to a liquid.	Melting	The wax melted as the candle burned.
Liquid to Gas	A liquid evaporates into a gas when heated.	Evaporation	When water evaporates, it becomes water vapor.
Gas to Liquid	When a gas is cooled it condenses into a liquid.	Condensation	The condensation of steam from the boiling tea kettle made the window fog up.
Liquid to Solid	When a liquid freezes it becomes a solid.	Freezing	When water turns into ice.

