

States of Matter - Y3 & Y4

Key Vocabulary

Evaporate	When a material changes from a liquid into a gas.
Freeze	When a material changes from a liquid to a solid.
Gas	Gases can spread out to completely fill the space they are in. They do not have any fixed shape but they do have a mass.
Liquid	Liquids take the shape of their container. They can change shape but do not change the amount of space they take up. They can flow or be poured.
Melt	When a material changes from a solid into a liquid.
Particle	A small piece of matter that cannot be seen with the naked eye.
Precipitation	Water that falls back to land from the atmosphere as rain, sleet, snow or hail.
Solid	Materials that keep their shape unless a force is applied to them. They can be hard, soft or even squashy. Solids take up the same amount of space no matter what has happened to them.
States of matter	Materials can exist in any of three states: solid, liquid or gas. Some matters can change from one state to another and back again.
Temperature	A measurement of how hot or cold something or somewhere is.
Thermometer	A piece of scientific equipment used for measuring temperature.
Water vapour	Water in its gaseous state.

Melting Point

This is the **temperature** at which a **solid** turns into a **liquid**.

0°C



32°C



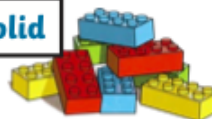
1064°C



States of Matter

'Matter' is the scientific word used to describe anything that takes up space. Matter exists in any of three different states.

solid



liquid



gas



Solids



The **particles** are close together in clear formations. The **particles** vibrate on the spot.

Liquids



The **particles** are quite close together but move around each other much more easily.

Gases



The **particles** move quickly in all directions, filling the space. There is much more space between the **particles**.

Changing State

Increasing the **temperature** of a **solid** can cause it to **melt** into a **liquid** and eventually **evaporate** the **liquid** into a **gas**.

Decreasing the **temperature** of a **gas** can **condense** it into a **liquid** and eventually **freeze** the **liquid** into a **solid**.

