

LKS2 KNOWLEDGE ORGANISER: STATES OF MATTER

What I have already learned in Science:

I have learned to describe the simple physical properties of everyday materials. To find out how the shapes of solid objects can be changed.

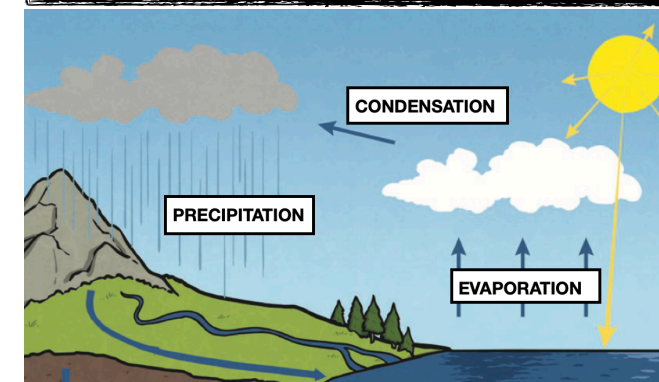
Key Vocabulary & Scientific terms

The Water Cycle	The continuous movement of water within the Earth.
Evaporation	Turn a liquid into a gas.
Condensation	Turn a gas into a liquid.
Precipitation	Liquid or solid particles that fall from a cloud as rain, sleet, hail or snow.
Melting point	The point at which a solid melts (different for different solids).
Freezing point	The point at which a liquid freezes (different for different solids).
Reversible change	A change that can be undone or reversed (e.g. melting ice).
Irreversible change	A change that cannot be undone or reversed (e.g. cooking a raw egg).

Core Knowledge - By the end of this unit, I will be able to:

1. Know that water moves in a cycle due to changes in temperature causing the water to change from one state to another. Conduct an experiment to investigate condensation.
2. Understand the properties of ice.
3. Understand what reversible and irreversible changes are.
4. Review learning from the term and create a presentation to demonstrate this.

The Water Cycle:



WHAT IS ICE?



Ice is SOLID water

Ice has a definite shape and volume.

The **melting** and **freezing point** of ice is 0°C.

Ice can float because of the unique arrangement of particles making it less dense than liquid water.

Reversible and irreversible changes

A **reversible change** is one in which a material turns into something that looks and feels different. But then it can be changed back to its original substance.

An **irreversible change** is one in which a new and different material is made. This new material cannot be changed back into its original form.

Examples of reversible changes include



Folding Paper



Dissolving Sugar in Water



Melting of Ice



Stretching a Spring

Examples of irreversible changes include



Burning Paper



Cooking Vegetables



Rusting Iron



Tearing Paper