

Year 4 Science Knowledge Organiser – States of Matter

Selected Vocabulary and Definitions

Solid	Holds its shape. Has a fixed volume. Particles packed densely together.
Liquid	Changes shape to suit the container. Has a fixed volume. Particles flow easily around.
Gas	No fixed shape or volume. Particles spaced far away from each other and move freely.
Evaporation	Change from liquid to gas.
Condensation	Change from gas to liquid.
Precipitation	Any form of water that falls from clouds.
Temperature	The degree of heat in an object or substance.

Curriculum Objectives

I can group materials together, according to whether they are solids, liquids or gases including tricky ones like gels, foams, mists and pastes.

I can demonstrate and explain that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).

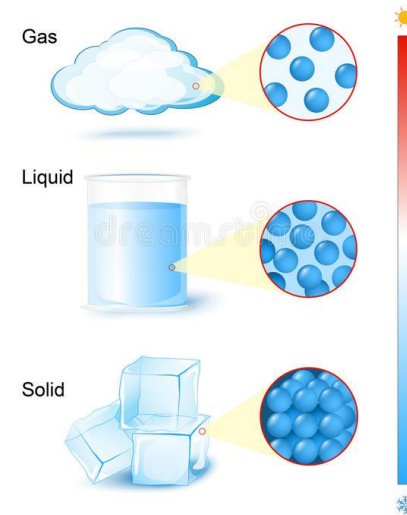
I can correctly talk about the part played by evaporation and condensation in the water cycle and can show a link between the rate of evaporation and temperature.

Working Scientifically

I can investigate the different melting points of chocolate.

Key Knowledge

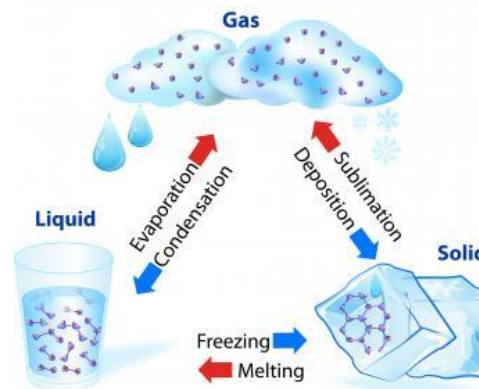
STATES OF MATTER



Key Questions

- Give one example of a solid, a liquid and a gas. What is different between them?
- What happens to water when it is heated?
- At what degree Celsius is boiling point?
- What causes water to evaporate?
- Which term is used to describe water vapour cooling and changing to liquid water?

STATE OF MATTER



Water Cycle

