

National Curriculum History

*Pupils should be taught to:*

Compare and group materials together, according to whether they are solids, liquids or gases.

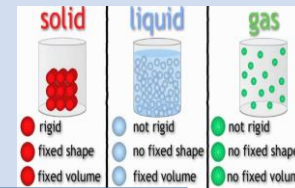
Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).

Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Key Learning

- How to compare and group materials together, according to whether they are solids, liquids or gases.
- How to observe 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).
- How to identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

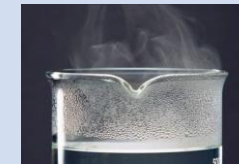
What is a solid, liquid and gas?



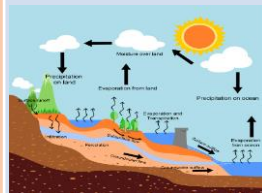
What effect does temperature have on states of matter?



What is evaporation and condensation?



How does the water cycle work?



Vocabulary

**Evaporation** The process of turning from liquid into vapour.

**Condensation** The change of the state of matter from the gas phase into the liquid phase.

**Solid** Firm and stable in shape; not liquid or fluid.

**Liquid** A material whose particles have gaps between them and moderate energy.

**Gas** A substance which will expand freely to fill the whole of a container, having no fixed shape (unlike a solid) and no fixed volume (unlike a liquid).

	Key Learning:
1	<b>Solid, Liquid or Gas?</b> To compare and group materials together, according to whether they are solids, liquids or gases by sorting and describing materials into solids, liquids and gases.
2	<b>Investigating Gases</b> To compare and group materials together, according to whether they are solids, liquids or gases by investigating gases and their uses.
3	<b>Heating and Cooling</b> To observe 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) by investigating how heating and cooling can change a material's state.
4	<b>Wonderful Water</b> To observe 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) by exploring how water can change its state to a solid, liquid or a gas.
5	<b>Evaporation Investigation</b> To associate the rate of evaporation with temperature by investigating the effect of temperature on drying washing. To make systematic, careful and accurate observations and measurements and report on findings from enquiries by displaying results and conclusions by investigating the effect of temperature on drying washing.
6	<b>The Water Cycle</b> To identify the part played by evaporation and condensation in the water cycle by creating a model of the water cycle.