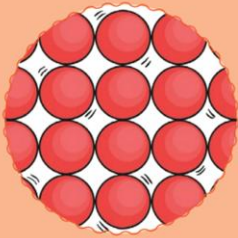


Knowledge Organiser

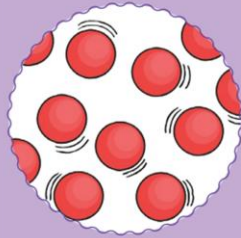


States of Matter

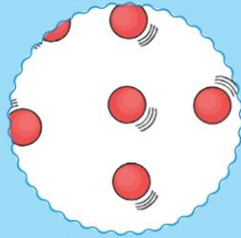
Solid



Liquid



Gas



Scientific Enquiry Types:

Observation

Classification

Comparative Fair Test

Research

Sticky Knowledge

- Materials can be grouped as solids, liquids or gases based on their properties.
- Solids keep their shape, liquids take the shape of their container, and gases spread out to fill the space available.
- Temperature can be measured using a thermometer.
- Heating and cooling can cause materials to change state.
- Different materials change state at different temperatures.
- Evaporation happens more quickly at higher temperatures.
- The water cycle involves evaporation, condensation and precipitation.
- In the water cycle, water evaporates, forms clouds by condensation, and falls as rain, hail or snow.

Vocabulary

states of matter – the different forms that materials can be in, for example, solid, liquid or gas.

solid – a material that keeps its shape and does not flow.

liquid – a material that can flow and takes the shape of its container.

gas – a material that spreads out to fill the space around it. Most gases cannot be seen.

particle – a tiny piece that makes up everything around us. Materials are made of lots of tiny particles.

temperature – a measure of how hot or cold something is.

freezing – when a liquid gets cold and turns into a solid.

melting – when a solid is heated and turns into a liquid.

condensation – when a gas cools down and turns into a liquid.

evaporation – when a liquid slowly changes into a gas, usually when it is warmed.

precipitation – water that falls from clouds to the ground as rain, snow, sleet or hail.

water vapour – water in its gas form. It is invisible and in the air around us.