St Peter's Roman Catholic Primary School

Science Year 4 Autumn

Materials and States of Matter

What is this topic about? This topic examines the properties of 3 states of matter; solids, liquids and gas. We will compare and group materials together, according to whether they are solids, liquids or gases. We will then begin to investigate the differences between solids and liquids by examining and comparing the properties using simple practical enquiries and comparative and fair tests.



I will show my scientific skills by…

- **Grouping and classifying** a variety of different materials.
- **Investigate and fair test** the effect of temperature on substances
- **Researching the temperature** at which materials change state,
- **Observing and recording** evaporation over a period of time

At the end of the Topic I will know…

- A **solid** keeps its shape and has a fixed volume.
- A **liquid** has a fixed volume but changes in shape to fit the container. A liquid can be poured and keeps a level, horizontal surface.
- A **gas** fills all available space; it has no fixed shape or volume.
- The Water cycle is cycle of water changing from gas (water vapour) to liquid.

KEY VOCABULARY

Matter - Any solid, liquid or gas that exists in the universe.
Solid -A substance which stays the same shape whether in a container or not.
Liquid - A substance which can flow and take on the shape of a container.
Gas - Substance that has no fixed shape, like oxygen.
Temperature - How hot or cold something is, normally measured in degrees Celsius (°C).
Evaporation - The process of liquid heating and changing into a gas.
Condensation - The process of a gas cooling and changing into a liquid
Water Cycle - The process of water being recycled over and over again.
Particle - An extremely small unit of matter.
Water Vapour - This is water that takes the form of a gas. When water is boiled, it evaporates into a water vapour