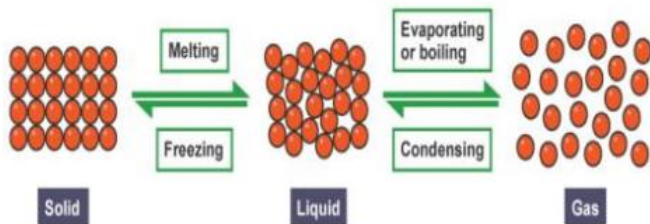
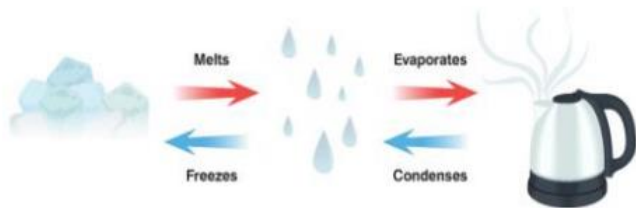


## Year 5 – Properties and Changes of Materials

### States of Matter



Sugar dissolves in the water making a sugar solution. You cannot see the sugar but it is still there in tiny particles.

The water evaporates. This means that it becomes water vapour. The process will be quicker if the water is heated.

Once all the water has evaporated, the sugar is left at the bottom of the beaker. This is because sugar cannot evaporate.

### Separating Solids and Liquids

<b>filtering</b>	Separates an insoluble solid from a liquid.
<b>sieving</b>	Separates solids of different sizes
<b>evaporation</b>	Separating dissolved substances from liquids.

### Reversible and Irreversible Changes

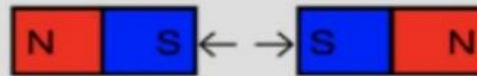
<b>Reversible change</b>	Changes that are not permanent. Dissolving, mixing, melting, freezing are reversible changes. E.g. water turning to ice or steam.
<b>Irreversible change</b>	Changes that are permanent and cannot be undone. Results in the making of a new material. e.g. burning wood, baking a cake.

### How magnets work

Magnets have a North and a South Pole. North is often Red while South is often Blue. Arrows show the direction of the force in this diagram



Opposite poles attract



Same poles repel

### Vocabulary

<b>Conductor</b>	A material or device which allows heat, sound or electricity to carry through easily
<b>Dissolve</b>	When something solid mixes with a liquid and becomes part of the liquid
<b>Evaporation</b>	The process of turning from liquid to vapour
<b>Flexible</b>	Capable of bending easily without breaking
<b>Gas</b>	An air-like fluid substance which expands freely to fill any space available
<b>Insulator</b>	A substance which does not readily allow passage of heat, electricity or sound
<b>Liquid</b>	A substance that flows freely but can be measured by volume.
<b>Magnetic</b>	Capable of being magnetised or attracted by a magnet
<b>Opaque</b>	Not able to be seen through at all; unable to let light be seen through it
<b>Solid</b>	Firm and stable in shape, not a liquid or fluid
<b>Soluble</b>	Able to be dissolved, especially in water
<b>Transparent</b>	allowing light to pass through so that objects behind can be distinctly seen
<b>Thermal</b>	Relating to heat