Year 5 – Properties and changes of materials

Key Knowledge

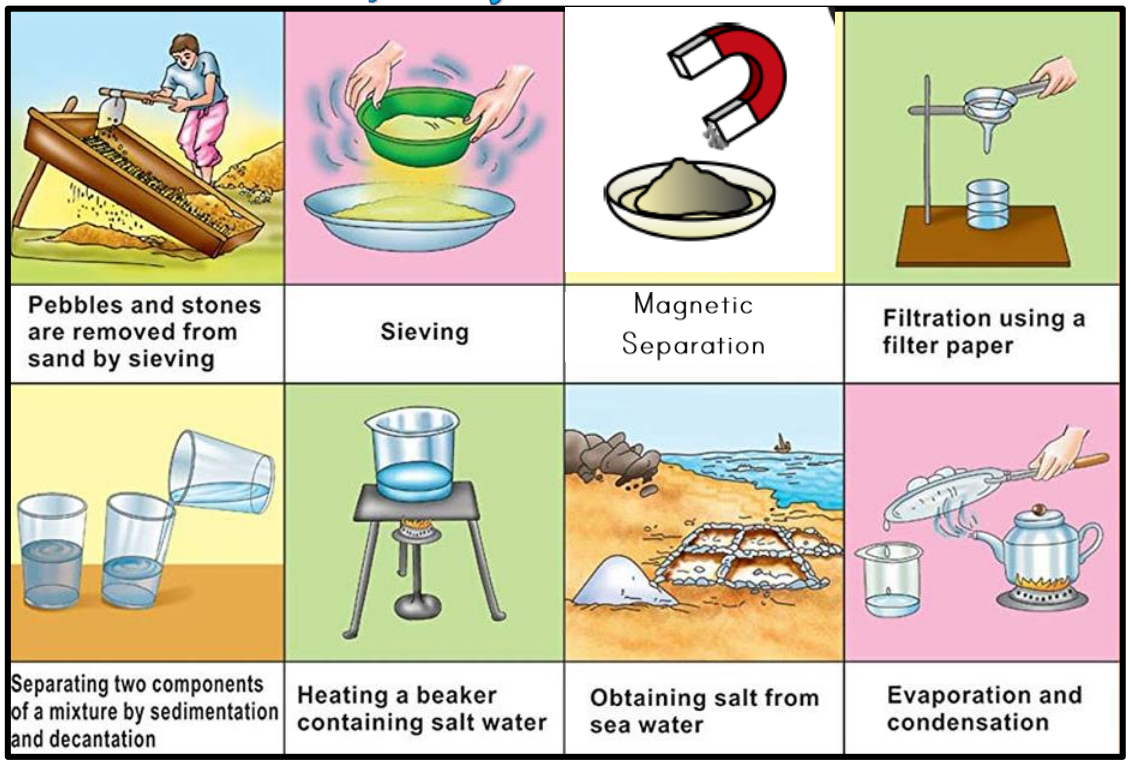
Solids **melt** into liquids.
Liquids **evaporate** into gases.
Liquids **freeze** into solids.
Gases **condense** into liquids.

A **solution** is a mixture of two or more substances.

In such a mixture, a solute is a substance dissolved in another substance, known as a solvent.

A **mixture** is when two or more substances are combined. **Mixtures** do not have a **chemical** reaction, such as dissolving or burning. Furthermore, a **mixture** can be reversed, or separated, after being combined.

Separating Mixtures



Key Vocabulary	
condense	Change from gas or vapour to a liquid.
conduction (electrical)	The movement of an electrical charge through a material.
conduction (thermal)	The transfer/movement of heat through a material.
evaporate	Turn from liquid into a vapour. Lose moisture or solvent as vapour.
filtering	To pass a substance through a device to remove unwanted material.
freeze	To turn a liquid into a solid as a result of extreme cold.
gas	A substance which expands freely to fill a container, has no fixed shape. Particles are randomly arranged and move freely.
irreversible	Not able to be undone.
liquid	A substance that flows: doesn't hold its own shape but volume is maintained. Particles are more randomly arranges, which allows them some movement.
melt	To make or become liquid by use of heat.
opaque	Not able to be seen through; not transparent.
particles	A minute portion of matter, the smallest of which is an atom.
reversible	Able to be undone.
sieving	To pass larger substances through a device to remove unwanted material.
solid	A substance that retains its own size and shape. Particles cannot move except to vibrate
solute	A substance, which is dissolved in the solvent.
solvent	The solvent (usually water) is the substance that has a solute dissolved in it.
transparent	Allows light to pass through so that objects behind it can be clearly seen.
translucent	Allows light to pass through but not detailed shapes.