

Properties of Materials Year 5/6 Knowledge Organiser

Key Vocabulary

Mixture - is a material made up of two or more different substances

Decantation - This is the process of separation of liquid from solid and other immiscible (non-mixing) liquids, by removing the liquid layer at the top from the layer of solid or liquid below. The process can be carried out by tilting the mixture after pouring out the top layer

Liquid - A substance that flows freely but can be measured by volume e.g. water or oil

Magnetic - Capable of being magnetised or attracted by a magnet

Solid - Firm and stable in shape, not a liquid or fluid

Opaque - Not able to be seen through, not transparent

Transparent - Able to see through not opaque

Translucent - allowing light to pass through but not showing the distinct images on the other side. An example of translucent is a frosted glass vase.

Insoluble - unable to be dissolved, especially in water

Soluble - Able to be dissolved, especially in water

Dissolve - When something solid mixes with a liquid and becomes part of the liquid

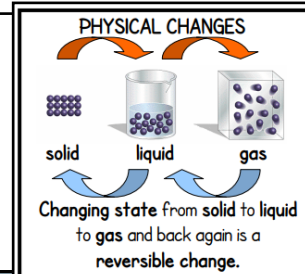
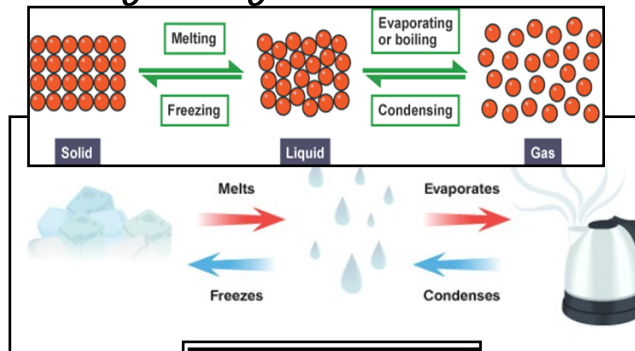
Evaporation - The process of turning from liquid to vapour

Gas - An air-like fluid substance which expands freely to fill any space available

Irreversible - Cannot be reversed back to its original state

Reversible - Able to be reversed back to its original state

Solution - a liquid mixture in which the minor component (the solute) is uniformly distributed within the major compo-

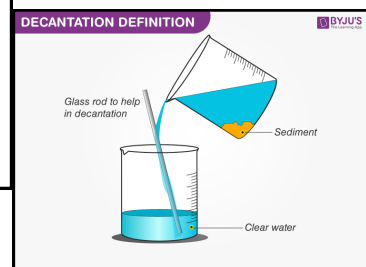
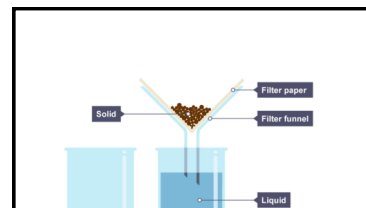


Why Salt Makes Ice Colder

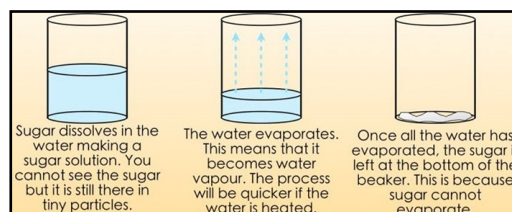
Salt lowers the freezing point of water. Ice absorbs energy as it melts, but the salt water does not release energy by freezing.

Melting is endothermic, so ice gets colder!

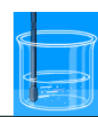
Freezing is exothermic, but the salt water has a lower freezing point.



Any **reaction**, such as burning, that causes new **substances** to be formed is called a **CHEMICAL CHANGE**. These changes are **irreversible**.



Dissolving sugar in water is a reversible change. When the water is **evaporated** it leaves the sugar behind.



When chocolate is melted it can **solidify** again. The change is **reversible**.

