

Properties of Materials Knowledge organiser

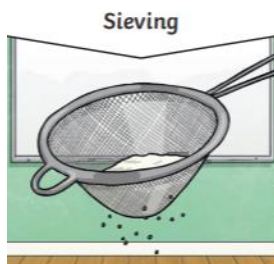
Key words

- Transparent - Allowing light to pass through
- Magnetic- Magnetism is an invisible force or field that causes objects to attract or repel one another.
- Soluble- It can be dissolved in liquid.
- Conductivity- A material's ability to conduct an electric current.
- Solute- A solute is a substance that can be dissolved into a solution.
- Solvent- A solvent is substance (molecule) with the ability to dissolve other substances
- Dissolve- A substance has just mixed with the water to make a transparent (see-through) liquid.
- Evaporation- Happens when a liquid turns into a gas
- Filtration- The process in which solid particles in a liquid or gaseous fluid are removed using a filter medium that permits the fluid to pass through but retains the solid particles.
- Irreversible change- It cannot be changed back again.
- Reversible change- A change that can be undone or reversed

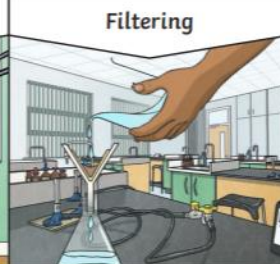
Why do we sprinkle our playground with salt in ice weather?

Salt makes ice melt faster because it disrupts the hydrogen bonds between water molecules.

Reversible changes, such as mixing and dissolving **solids** and **liquids** together, can be reversed by:



Smaller **materials** are able to fall through the holes in the sieve, separating them from larger particles.



The **solid** particles will get caught in the filter paper but the **liquid** will be able to get through.



The **liquid** changes into a **gas**, leaving the **solid** particles behind.



Irreversible changes often result in a new product being made from the old **materials** (reactants). For example, burning wood produces ash. Mixing vinegar and milk produces casein plastic.

