

# Knowledge Organiser

## VOCABULARY

**Solid**- Firm shape or form that can be measured in length, width, and height not like a liquid or gas. Tightly packed molecules.

**Liquid**- no defined shape, takes the shape of its container. Particles free to move over each other.

**Gas**- easy to compress, expand to fill containers and occupy more space than liquids or solids.

**transparent**- You can see through it

**Soluble**- able to be dissolved

**insoluble**- cannot be dissolved.

**Conductor**- a substance that heat or electricity can pass along or through.

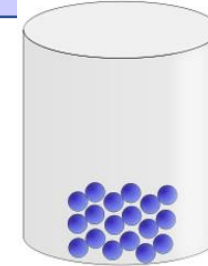
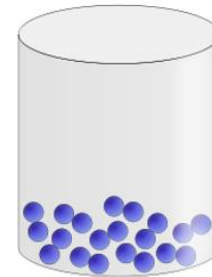
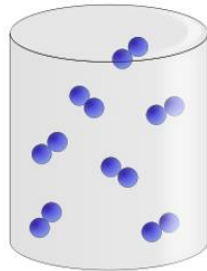
**Filtering**- a device used to remove dirt or other solids from liquids or gasses.

**Evaporation**- turn liquid into a gas; pass away in the form of vapour.

**Condensation**- small drops of water which form when water vapour or steam touches a cold surface.

**Reversible**- can be changed back e.g. ice to water.

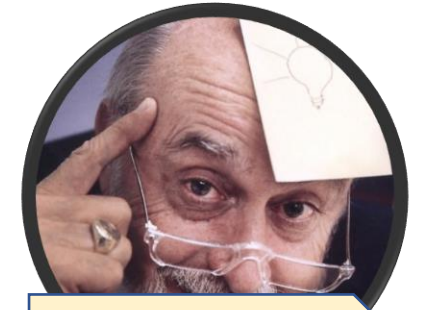
## States of Matter



**Gas**- particles move freely and expand to fill container.

**Liquid**- no defined shape, takes the shape of its container.

**Solid**- firm shape with tightly packed molecules.



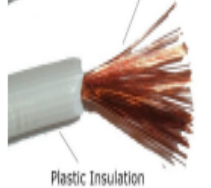
Spencer Silver invented the 'Post It Note' by mistake.

## Electrical conductors

**Electrical conductors** allow electricity to pass through them easily while electrical insulators do not.



**Electrical insulators** have a high resistance which means that it is hard for electricity to pass through these objects.



## Grouping Materials based on properties.



# Year 5 Properties of Materials

## Processes

<p>Sieving</p> 	<p>Boiling</p> 
<p>Filtering</p> 	<p>Condensation</p> 
<p>Evaporation</p> 	<p>Distillation</p> 

## Dissolving

Two substances becoming one solution.



## Melting

Changes state but does not mix.



## Irreversible Changes

Often result in a new product being made from the old material.

For example **burning wood produces ash**



## Reversible Changes

You can change it back to its original state.

