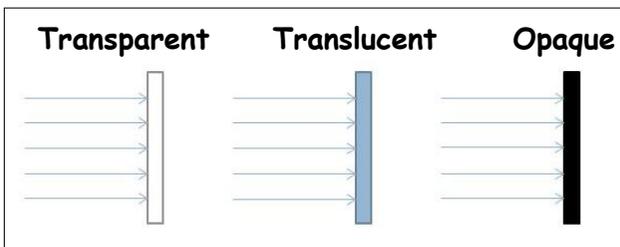
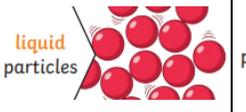
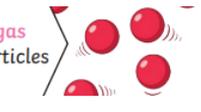
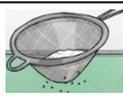


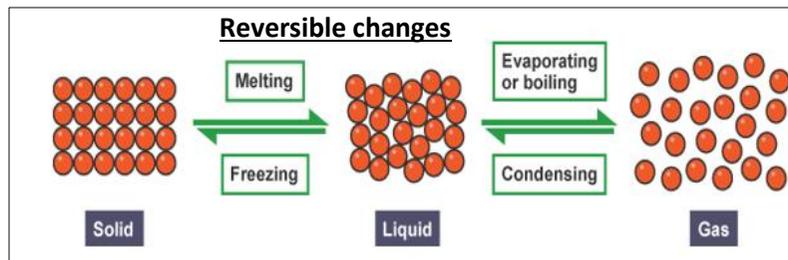
Year 5 Properties and changes of materials Knowledge Organiser

Properties of Materials	
Hardness	A measure of how hard or soft a material is.
Permeable	A material that allows liquids or gases to pass through it
Soluble	A substance will dissolve in a liquid.
Insoluble	A substance will not dissolve in a liquid.
Transparent	A material that allows light to pass through it and is see-through.
Opaque	A material you cannot see through.
Translucent	A material that allows light, but not detailed shapes to pass through.
Electrical-conductor	A material that allows electricity to flow through it
Thermal conductor	A material that allows heat to travel through it easily.
Magnetic	Is attracted by or can acquire the properties of a magnet .



Solids	Liquids	Gases
Solids keep their shape and can be held.	Liquids can flow and change shape depending on the container they are in.	Gases have no fixed shape. They change their shape and volume to fill up whatever container they are in.
		

Separating Solids and Liquids	
Filtering 	Solid particles will get caught in the filter paper but the liquid will be able to get through.
Sieving 	Smaller particles are able to fall through the holes in the sieve, separating them from larger particles.
Evaporation 	The liquid changes into a gas leaving the solid particles behind.



Vocabulary Dozen	
Condensation	Is the process by which water vapour (water in its gas form) turns into a liquid.
Conductivity	Defines a material's ability to conduct electricity.
Dissolving	When a solid is dissolved in a liquid to produce a solution.
Evaporation	A process that involves a liquid becoming a gas (water vapour).
Filtering	A process that involves removing small particles of insoluble or undissolved material from a liquid.
Solution	A solution is created by dissolving materials in a liquid.
Mixture	Is a substance made by combining two or more different materials.
Irreversible change	Changes that are permanent and cannot be undone. Result in the making of a new material. e.g. baking a cake.
Reversible change	Changes that are not permanent. Dissolving, mixing, melting, freezing are reversible changes. e.g. water turning to ice or steam
Sieving	Separates solids of different sizes.
Solubility	The ability of a substance to dissolve
Transparency	Is the quality of being easily seen through (transparent).