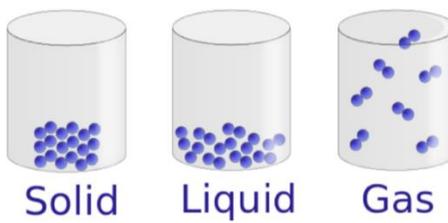


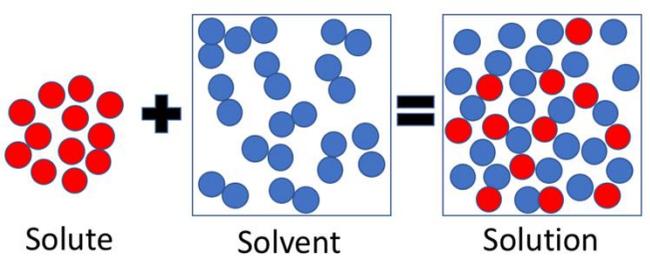
PROPERTIES AND CHANGES OF MATERIALS – Knowledge Organiser Year 5 Spring 1	
Vocabulary	The Particle Model
particle	Tiny building blocks which make up matter.
bonds	The forces holding particles together.
transparency	The property of allowing light to pass through.
translucency	The property of allowing light to partially pass through.
hardness	A measurement of how hard something is.
magnetism	Having the force that attracts to a magnet.
electrical conductivity	The ability to allow electricity to pass through.
thermal conductivity	The ability to allow heat to pass through.
substance	A solid, liquid or gas with particular properties.
mixture	A combination of substances which can be separated.
dissolve	To mix with a liquid to form a solution.
soluble / insoluble	Can dissolve / Cannot dissolve.
solvent	A liquid that can dissolve other substances.
solution	A mixture where one substance is dissolved in a liquid.
solubility	The measure of how soluble something is.
reversible	A change that can go both ways.

The Particle Model is used to explain the physical properties of solids, liquids and gases. It describes the arrangement and movement of particles in a substance.



	Particle Arrangement	Particle Movement
Solid	Regular Close together	Vibrate about a fixed position
Liquid	Random Close together	Move around each other
Gas	Random Far apart	Move quickly in all directions

Dissolving



Solute + Solvent = Solution

Salt + Water = Saltwater
Sugar + Tea = Sugary Tea

Reversible Changes

These are changes which can be reversed or undone. Examples include:

- Melting
- Freezing/solidification
- Evaporation
- Condensation
- Mixing
- Dissolving