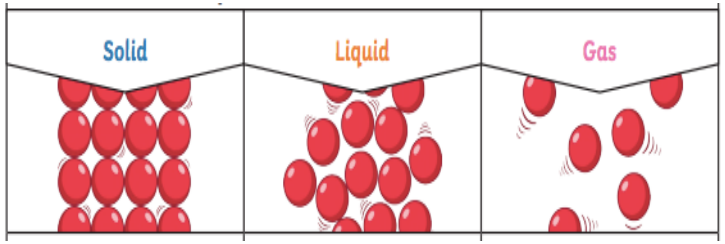
Year 5: Properties and Changes of Materials Learning Organiser

Subject Specific Vocabulary	
solution	When solids and liquids mix and cannot be easily separated again.
dissolve	When solids are fully mixed with a liquid to form a solution.
insoluble	This is a material that won't dissolve in a liquid
soluble	This is a material that will dissolve in a liquid
mixture	This is a mixture of solids and liquids which can be easily separated.
filtering	The process by which solids are removed from a liquid.
sieving	A process for separating larger, rough particles from smaller, smoother particles.
reversible changes	When a material changes state and can usually go back to its original state. For example water can be reversed from a gas to a liquid by condensation.
not usually reversible	When a material changes state and can't always change back to its original state, often producing a new material.
new material	The result of an irreversible change of state e.g. burning wood produces a new material - ash

Solid, liquid and gas: Particles

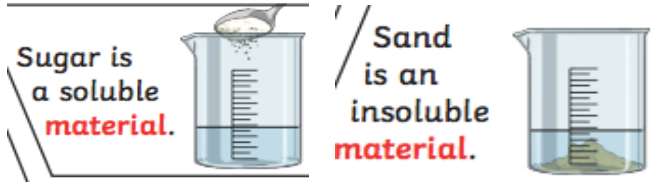


Solid particles are usually close together. They don't move and only vibrate.

Liquid particles are more spread out, so they can move around more.

Gas particles are far apart and move in all different directions.

Soluble and insoluble materials





A suspension is when particles don't dissolve. For example oil and water don't mix, so you can see the oil particles clearly when it is mixed with water.

