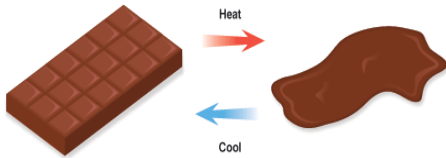
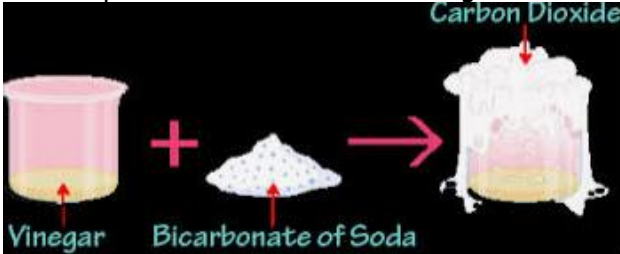







Year Five Materials – Properties and Changes of Materials

Things you need to know...	
Reversible change	<p>Changes that are not permanent. Dissolving, melting, freezing are all reversible changes.</p> 
Non-Reversible change	<p>Changes that cannot be changed back to their original state or starting point. Burning wood is an example of a non-reversible change</p> 



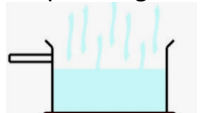
Dissolve	Soluble	Insoluble	Solution	Evaporate
	<p>SOLUBLE</p>  <p>The substance will dissolve in a liquid</p>	<p>INSOLUBLE</p>  <p>The substance will NOT dissolve in a liquid and formed precipitate</p>		
When solid particles are mixed with liquid particles and all that remains is liquid. The solid is still there - you can't see it.	Sugar and salt are soluble materials.	Sand is not soluble.	A mixture where one thing is dissolved into another.	When a liquid turns into a gas

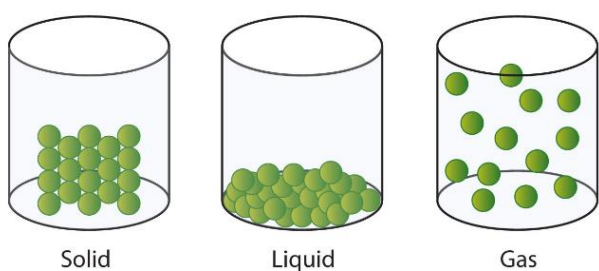
Thermal Conductor	A material which lets heat travel through it such as metal.
Electrical Conductor	A material which lets electricity travel through it. Metal does this too.
Thermal Insulator	A material which does NOT let heat travel through it. Polystyrene is a good example.
Thermal Conductor	A material which does not let electricity travel through it such as plastic.

Different materials are used for different jobs based on their properties.

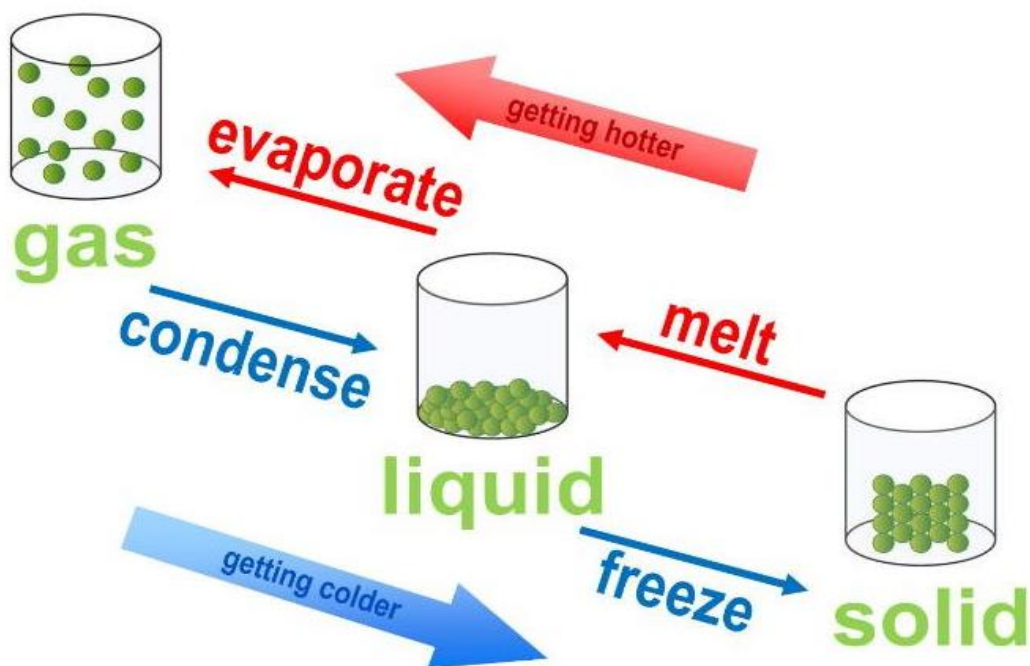
Materials are chosen depending on if they are; good conductors, good insulators, soluble, insoluble, flexible or transparent.

Year Five Materials – Properties and Changes of Materials

<p>Sieving</p> 	<p>When you use a sieve, smaller materials are able to fall through the holes. Sieving can be used to separate stones and sand.</p>
<p>Filtering</p> 	<p>When you filter a solution, solid particles stay behind on the filter paper and the liquid passes through. You can separate sand and water in this way.</p>
<p>Evaporating</p> 	<p>Liquid will change into a gas, leaving only the solid behind. You can separate salt and water in this way. Heat up the salt water solution and the salt will be left as the water evaporates.</p>



Particles in materials look like this.



These are the ways in which materials can change state.