



Knowledge Organiser Science Year 5 Properties and changes of materials

Key Vocabulary	
Absorbent	Able to soak up liquid easily
Electrical conductor	Allows electricity to pass through
Electrical insulator	Does not allow electricity to pass through
Flexible	Bends easily without breaking
Opaque	Not clear. Blocks light so that none gets through
Property	A characteristic of a material that can be observed
Non-reflective	Does not reflect light
Reflective	Reflects light
Rigid	Unable to bend or be forced out of shape
Transparent	Clear, see-through, lets light pass through
Translucent	Almost see through, lets some light through
Waterproof	Does not let water pass through it

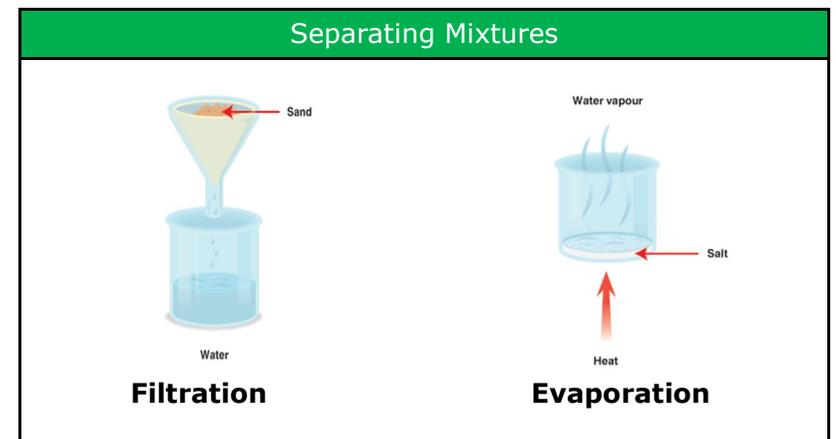
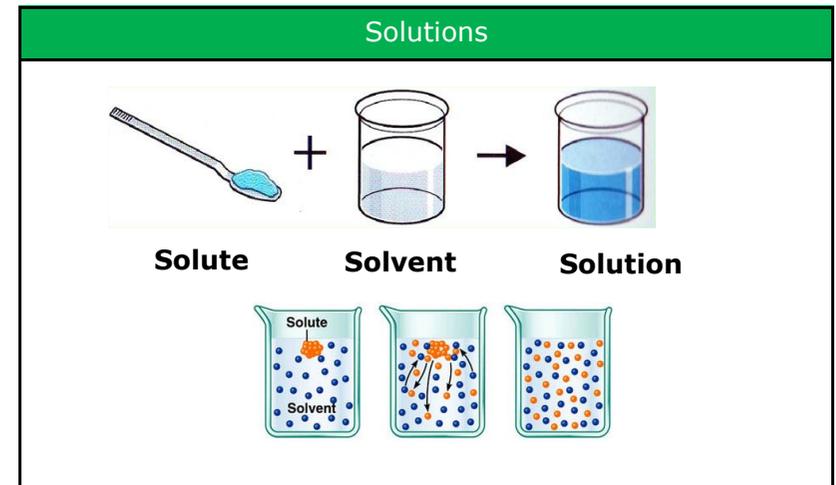
Materials	
Natural	Manufactured
<p>A natural material is a product that comes from plants, animals, or the ground</p> 	<p>A manufactured material is made from natural materials using chemical processes</p> 

Material	Properties	Uses
wood 	opaque hard strong	table 
metal 	shiny smooth reflective	fork 
plastic 	waterproof bendy translucent	water bottle 
glass 	transparent waterproof hard	window 
brick 	hard rough dull	wall 
rock 	strong hard rigid	fireplace 
paper 	tears easily translucent flexible	book 
cardboard 	dull non-reflective opaque	boxes 
fabric 	flexible Soft absorbent	clothes 



Knowledge Organiser Science Year 5 Properties and Changes of Materials 2

Key Vocabulary	
Concentration	How much of a substance is dissolved in water. If a solution is concentrated, more particles of the substance are present
Dilute	A solution can be made more dilute by adding more solvent
Dissolve	Some substances dissolve when you mix them with water. When a substance dissolves, it looks like it disappears
Evaporate	When a liquid changes state and turns into a gas
Insoluble	When a substance cannot dissolve in a particular solvent. For example, sand is insoluble in water
Irreversible	A change which cannot be undone
Residue	The material that is left when a mixture is filtered
Reversible	A change which can be undone
Saturated	A saturated solution is a solution in which there is so much solute that if there was any more, it would not dissolve
Solubility	the ability of a substance to dissolve
Soluble	Substances that dissolve in water are called soluble substances
Solute	The dissolved substance in a solution
Solution	Mixture formed by a solute and a solvent
Solvent	The liquid in which the solute dissolves to form a solution



Chemical and Physical Changes		
<p>Physical Changes</p> <p>Easy to reverse</p> <p>No new substances formed</p>		<p>Chemical Changes</p> <p>Difficult to reverse</p> <p>New substances formed</p>