



Science substances Rec to Y6

SCIENCE SKILLS REC to Y6 SUBSTANCES, MATTER AND MATERIALS							
	EYFS Skills	Key Stage 1 Skills		Lower Key Stage 2 Skills		Upper Key Stage 2 Skills	
	End of REC Expectations	End of Year 1 Expectations	End of Year 2 Expectations	End of Year 3 Expectations	End of Year 4 Expectations	End of Year 5 Expectations	End of Year 6 Expectations
Identifying and naming	<p>The World</p> <ul style="list-style-type: none"> I look closely at similarities, differences, patterns and change <p>Early Learning Goal</p>	Name a range of everyday materials, including wood, plastic, metal, rock and glass.	Identify the uses of everyday materials in a familiar location (e.g. school or home), recording their findings.	Identify and name a range of rocks and soils, describing how fossils are formed (link to evolution).	Identify how water changes state, using the correct terminology and relate these key processes to the water cycle.	Identify a wide range of reversible and irreversible changes that are in use in everyday life.	
Classification	<ul style="list-style-type: none"> I know about similarities and differences in relation to objects, materials and living things I can talk about changes 	<p>Group and sort materials according to their simple physical properties.</p> <p>Identify the material an objects is made from, suggesting why it is made from that material.</p>	<p>Sort and grade a range of materials for a specific property (e.g. smoothness).</p> <p>Identify and describe the range of materials that can be used to make a single given object (e.g. cup, chair, table or shelter).</p>	<p>Classify and group rocks according to their appearance of physical properties, using a hand lens or digital microscope and identifying whether they are granular, crystalline or fossilised.</p> <p>Suggest reasons why certain</p>	<p>Classify everyday materials as a solid, liquid or gas at room temperature.</p> <p>Describe a material whose use changes as its state changes.</p>	<p>Classify and group mixtures for how they can be separated, including sieving, filtering and evaporating.</p> <p>Provide evidence and reasons why a material has been chosen for a specific use. Scientifically and systematically compare the functionality of a</p>	



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				rocks or stones are used for specific purpose.		range of material to perform a specific function.	
Physical processes		Identify the material an object is made from, suggesting why it is made from that material.	Describe how the shape of some materials can be changed by twisting, bending, squashing or stretching.	Explain the terms 'weathering' and 'erosion' and describe the effect they have on different types of rocks and soils.	Explain the effect of heating and cooling on a range of substances, including water.	Describe what happens when a solute dissolves in a solvent to form a solution and how this process can be reversed.	
Physical properties		Describe properties of a material using everyday language or simple scientific vocabulary (e.g. hard/soft or bendy/not bendy).	Relate a material's physical properties to its uses (e.g. describe or demonstrate how a material can be unsuitable for a given task due to its ability to be changed by squashing and bending).	Investigate the physical properties of one or a number of rock types and relate their properties to their appearance.	Describe the properties of solids, liquids and gases, giving examples of each (e.g. solids retain their shape).	Describe comprehensively some familiar and unfamiliar material's physical properties, including transparency, conductivity, solubility and magnetism.	
Comparisons		Compare two or more different	Compare significant	Compare in detail a range of	Measure or research the	Compare reversible with irreversible	



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		materials for their performance at a particular task (e.g. mopping up a spill).	individuals who have developed useful materials (e.g. Charles Macintosh or John Dunlop) and decide which individual's material is of most use to them.	rock or soil samples from the locality, using simple tables and diagrams to present their findings.	temperature, in degrees Celsius ("C), at which materials change state and compare to the temperatures at which water changes state.	change, using flow diagrams/equations to show which materials are added, what is made and indicating if the reaction can be reversed.	
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