



WHOLE SCHOOL KNOWLEDGE PROGRESSION DOCUMENT – CHEMISTRY

	Different rocks have different properties and the formation of soil & fossils can be explained	Materials have physical properties which can be investigated and compare	The physical properties of materials determine their uses	Materials can exist in different states and that these states can sometimes be changed
ELG	Children know about similarities and differences in relation to places, objects, materials and living things.			
YEAR 1 & 2		<p>Distinguish between an object and the material from which it is made</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p> <p>Describe the simple physical properties of a variety of everyday materials</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p>	
YEAR 3 & 4	Describe in simple terms how fossils are formed when things that have lived are trapped within rock	<p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>Compare and group materials together, according to whether they are solids, liquids or gases</p>		<p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</p> <p>Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p>
YEAR 5 & 6		<p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda</p>	<p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p>	