

KNOWLEDGE PROGRESSION YEAR GROUP OVERVIEW – Science (Chemistry)

Science: Chemistry						
	At both key stages the knowledge progression takes full account of the National Curriculum's Chemistry strands of: <ul style="list-style-type: none"> ○ Everyday materials ○ Rocks ○ States of matter ○ Properties and changes in materials 					
	Skills are dependent on specific knowledge. A skill is the capacity to perform and in order to perform a deep body of knowledge needs to be acquired and retained.					
	Knowledge statements should be what pupils retain for ever. In other words, this knowledge is within their long-term memory and will be retained.					
	When considering pupils' improvement in subject specific vocabulary, pupils could be provided with a knowledge organiser which contains all words used for geography for their age group.					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Everyday materials	<ul style="list-style-type: none"> • Know the name of the materials an object is made from • Know about the properties of everyday materials 	<ul style="list-style-type: none"> • Know how materials can be changed by squashing, bending, twisting and stretching • Know why a material might or might not be used for a specific job 				
Rocks		<ul style="list-style-type: none"> • Compare and group rocks based on their appearance and physical properties, giving reasons • Know how soil is made and how fossils are formed • Know about and explain the difference between sedimentary, metamorphic and igneous rock 				
States of matter EYFS Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.				<ul style="list-style-type: none"> • Group materials based on their state of matter (solid, liquid, gas) • Know the temperature at which materials change state • Know about and explore how some materials can change state • Know the part played by evaporation and condensation in the water cycle 		
Properties and changes in materials				<ul style="list-style-type: none"> • Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets 		

KNOWLEDGE PROGRESSION YEAR GROUP OVERVIEW – Science (Chemistry)

Properties and changes in materials					<ul style="list-style-type: none">• Know and explain how a material dissolves to form a solution• Know and show how to recover a substance from a solution• Know and demonstrate how some materials can be separated (e.g. through filtering, sieving and evaporating)• Know and demonstrate that some changes are reversible and some are not• Know how some changes result in the formation of a new material and that this is usually irreversible	
--	--	--	--	--	---	--