



Science Overview – Key Learning for Biology



	Rocks	Everyday Materials	Properties & Changes of Materials	States of Matter
Reception	<ul style="list-style-type: none">- Know that fossils are found in the ground.- How fossils are made.	<ul style="list-style-type: none">- Know can some materials can be used again and for a different purpose	<ul style="list-style-type: none">- Know materials can be joined together.- Some materials can be manipulated.- Some materials float.	
Year 1		<ul style="list-style-type: none">- All objects are made of one or more materials.- There is a difference between an object and the material from which it is made.- Materials have different properties.- Materials can be grouped together based on their properties.- We can perform simple tests to decide why one material might be better than another for a particular purpose		
Year 2		<ul style="list-style-type: none">- Properties are what a material feels like and how it behaves e.g. soft, stretchy, waterproof.- Suitability means having properties which are right for a specific purpose.- Man-made materials are made or caused by human beings e.g. plastic.		

		<ul style="list-style-type: none"> - Natural materials are those that are found in nature and have not been made by humans, like plants, rocks, and water. - The shape of some materials change be changed e.g. stretch, twist, bend and squash 		
Year 3	<ul style="list-style-type: none"> - There are three types of rock – sedimentary, igneous and metamorphic - Sedimentary rocks are formed with layers - Igneous rocks are formed from lava and volcanoes - Metamorphic rocks can change shape while they are forming - Different types of rock have different strengths 			
Year 4				<ul style="list-style-type: none"> - A solid keeps its shape and has a fixed volume. - A liquid has a fixed volume but changes in shape to fit the container and it can be poured - A gas fills all available space; it has no fixed shape or volume. - Evaporation is the same state change as boiling (liquid to gas).

				<ul style="list-style-type: none">- Condensation is the change back from a gas to a liquid caused by cooling.
Year 5		<ul style="list-style-type: none">- Any substance that is used to make something is a material. The words used to describe a material are known as its properties.- Thermal conductors are materials that will let heat through and thermal insulators will reflect heat.- In dissolving, the solid mixes into the liquid to make a new liquid, called a solution. Materials that will dissolve are known as soluble and materials that won't dissolve are insoluble.- Changes in materials can be permanent (chemical change) and some changes are not permanent (physical change).- Some solutions and mixtures are physical changes that require a specific technique to separate them. Such as: sieving, filtering, evaporation and condensation, magnetism and decanting.		