

Science Overview: Whole School

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	<p>Bears</p> <p><i>Explore the natural materials linked to the bear stories.</i></p>		<p>Biology</p> <p>Plants</p> <p><i>Identifying and naming common plants and describing basic structures</i></p>	<p>Biology</p> <p>Plant growth</p> <p><i>Plants grow from seeds, and require water, light and a suitable temperature</i></p>	<p>Chemistry</p> <p>Rocks</p> <p><i>Comparisons of types of rocks and how fossils are formed</i></p>	<p>Biology</p> <p>Classifying organisms</p> <p><i>Introduction to classifying animals and their environment</i></p>	<p>Chemistry</p> <p>Separating mixtures</p> <p><i>Identifying and separating mixtures; difference between reversible and non-reversible changes</i></p>	<p>Physics</p> <p>Electricity</p> <p><i>Investigating variations in series and parallel circuits, and how electricity is generated</i></p>
Autumn 2	<p>Special Days</p> <p><i>Explore Christmas themed materials using the 5 senses.</i></p>		<p>Biology / Physics</p> <p>Seasonal changes</p> <p><i>Observing changes across four seasons and describing associated weather</i></p>	<p>Biology</p> <p>Needs of animals</p> <p><i>Animals need water, food and air to survive and to have offspring</i></p>	<p>Physics</p> <p>Light</p> <p><i>Relationship between light and how we see; the formation of shadows</i></p>	<p>Biology</p> <p>Food & digestion</p> <p><i>The human digestive system and simple food chains</i></p>	<p>Biology, Chemistry, Physics</p> <p>Energy</p> <p><i>Introducing the concept of energy stores and energy transfers, and relating this to prior knowledge</i></p>	<p>Biology</p> <p>Evolution</p> <p><i>Fossils; introduction to the idea that adaptation may lead to evolution</i></p>
Spring 1		<p>Spring in Our Step</p> <p><i>Spring/ nature walks. Bean dairy</i></p>	<p>Chemistry</p> <p>Everyday materials</p> <p><i>Distinguishing objects from the material it's made from, and describing simple properties</i></p>	<p>Chemistry</p> <p>Uses of everyday materials</p> <p><i>Comparisons of an object's material with its use; impact of bending, twisting on solid objects</i></p>	<p>Biology</p> <p>Living organisms</p> <p><i>The role of muscles and skeletons; the importance of nutrients</i></p>	<p>Chemistry</p> <p>Particle model and states of matter</p> <p><i>States of matter in relation to particle arrangement</i></p>	<p>Biology</p> <p>Life cycles</p> <p><i>Life cycles of a mammal, amphibian, insect and bird, and some reproduction processes</i></p>	<p>Physics</p> <p>Light</p> <p><i>How light travels and is reflected, and how this allows us to see</i></p>
Spring 2	<p>On the Farm</p> <p><i>Plant and care for vegetables. Life cycles / animals and their young</i></p>		<p>Consolidation and review</p>	<p>Biology</p> <p>Living things & their habitats</p> <p><i>Basic introduction to habitats and micro-habitats, and simple food chains</i></p>	<p>Biology</p> <p>Plants</p> <p><i>The key features of flowering plants and what they need to survive</i></p>	<p>Physics</p> <p>Sounds</p> <p><i>Relationship between strength of vibrations and volume of sound</i></p>	<p>Biology</p> <p>Human development</p> <p><i>Human development to old age</i></p>	<p>Biology</p> <p>Further classification</p> <p><i>Further classification of living organisms based on characteristics</i></p>
Summer 1	<p>Once Upon a Time</p> <p><i>Observe changes through baking.</i></p>	<p>Science Detectives</p> <p><i>Seasons and weather</i></p>	<p>Biology</p> <p>Animals</p> <p><i>Identifying and naming fish, amphibians, reptiles, birds and mammals; carnivores, herbivores and omnivores</i></p>	<p>Chemistry</p> <p>Solids, liquids and gases</p> <p><i>Understanding how the same substances can exist as solids, liquids and gases</i></p>	<p>Physics</p> <p>Forces & motion</p> <p><i>Introducing pushes and pulls; opposing forces, and balanced forces</i></p>	<p>Physics</p> <p>Electricity</p> <p><i>Simple series circuits</i></p>	<p>Physics</p> <p>Forces</p> <p><i>Gravity, air and water resistance and friction; introduction to pulleys</i></p>	<p>Biology</p> <p>Functions of the human body</p> <p><i>Human circulatory system; transport of nutrients within the body</i></p>
Summer 2	<p>All Creatures Great and Small</p> <p><i>African animals and their young.</i></p>		<p>Biology</p> <p>Humans</p> <p><i>Human body parts and senses</i></p>	<p>Consolidation and review</p>	<p>Physics</p> <p>Friction & magnetism</p> <p><i>Contact and non-contact forces, including friction and magnetism</i></p>	<p>Chemistry</p> <p>Properties of materials</p> <p><i>Considering physical and chemical properties</i></p>	<p>Physics</p> <p>Earth and space</p> <p><i>Movements of planets and the Moon, and relationship to day and night</i></p>	<p>Chemistry</p> <p>Physical and chemical changes</p> <p><i>Identifying physical and chemical changes</i></p>