

Science Long Term Plan

	Autumn		Spring		Summer	
Year N	All About Me <i>Name parts of the body and changes which occur as we grow and get older; identify our senses and explore how we use them to make sense of the world.</i>	Celebrations <i>Name key celebrations which occur throughout the year; explore materials and shape to create symbols of celebrations; make observations of changes over time.</i>	Materials <i>Explore and identify a range of materials and discuss their key properties; observe changes to states of matter; apply knowledge of properties of materials through creating objects fit for purpose</i>	Traditional Tales <i>Make predictions and explain why changes to materials occur; apply knowledge of properties of materials through creating objects fit for purpose in the context of key traditional texts.</i>	Animals <i>Identify and name common animals from different habitats; discuss the impact of the different seasons on animals in a range of habitats.</i>	Minibeasts and Growing <i>Identify the stages of lifecycles; identify and name foods which are grown on plants; explore minibeasts and insects in the outdoor environment and consider their similarities and differences.</i>
	People Who Help Us <i>Identify and name key people who help us and link to keeping ourselves healthy; explore changing states of matter linked to key roles in society.</i>			Science Week		Transition to Reception <i>Use all their senses in hands-on exploration of natural materials; explore collections of materials with similar and/or different properties; understand the key features of the life cycle of a plant and an animal.</i>
Seasonal Change <i>Name the four seasons and describe changes which happen throughout the year; use key vocabulary to describe each season and link to first-hand experiences.</i>						
Year R and 1	Animals, including humans <i>Name main body parts and link to the senses; identify and name common animals and compare them based on their structures; sort animals based on their diets.</i>		Materials <i>Identify and name common materials and describe their key properties; compare and group materials based on their simple properties.</i>	Science Week	Plants <i>Identify and name common plants and trees; describe key features of common plants or trees and sort them based on these properties; understand the difference between deciduous and evergreen trees</i>	Seasonal Change <i>Name the four seasons and describe the weather changes throughout the year; describe how day length changes.</i>
	Seasonal Change <i>Observation of changes throughout the year linked to the seasons.</i>					
Year 1 and 2 (Cycle A)	Staying Alive <i>Observe changes in young over time; explain what animals and humans need to stay alive and maintain a healthy lifestyle</i>		Material World <i>Describe the properties of a range of materials and sort them based on these properties.</i>	Science Week	Looking after plants <i>Name and describe key features of common plants; identify parts of a plant; identify plants that grew well in different conditions; name the four seasons and describe the weather changes throughout the year; describe how day length changes.</i>	
Year 1 and 2 (Cycle B)	How does your garden grow? <i>Identify and describe the basic structure of common flowering plants; identify and name a variety of common plants; observe and describe how seeds and bulbs grow into mature plants.</i>		Changing Materials <i>Describe the properties of a range of materials and sort them based on these properties; find out how the shapes of solid objects can be changed.</i>	Science Week	Animal Safari <i>Identify and name a variety of common animals; describe and compare the structure of common animals; compare the differences between things that are dead, living or never been alive; describe how habitats provide the basic needs for animals and plants; describe the basic needs of animals.</i>	
Year 3	Rocks	Light	Forces and Magnets	Science Week	Animals including humans	Plants

	<i>Name types of rocks and describe their physical features and use these to classify them; explain how fossils are formed; explain how soils are made and that they contain living and dead matter.</i>	<i>Describe how we see objects and know the dangers of the sun; define transparent, translucent and opaque materials and explain how shadows are formed.</i>	<i>Provide examples of forces in everyday life; name types of magnets and explain how they attract and repel.</i>		<i>Name nutrients found in food and how to maintain a balanced diet; explain the purpose of our skeletal and muscular systems and how they work together to help us move.</i>	<i>Explain the functions of the structures of a flowering plant; describe the lifecycle of flowering plants and different methods of seed dispersal.</i>
Year 4	Animals, including humans <i>Identify parts of the digestive system and describe the function of teeth; interpret food chains and their impact.</i>	Sound <i>Understand patterns in pitch/volume and vibrations.</i>	Electricity <i>Create and draw simple series circuits; identify conductors and insulators and their uses in everyday life.</i>	Science Week	States of matter <i>Identify solids, liquids and gases and observe changes in states; understand the different phases of the water cycle.</i>	Living things and their habitats <i>Identify living things in local and wider environment; understand how to use classification keys accurately.</i>
Year 5	Earth and Space <i>Describe movement of planets and the Moon; explain day and night</i>	Forces <i>Understand the laws of gravity; describe the effects of air resistance, water resistance and friction; apply this knowledge to mechanical devices.</i>	Properties and changes of materials <i>Compare and group materials based on their properties; practice forming solutions and separation of mixtures; describe reasons for uses of materials; understand and observe reversible changes.</i>	Science Week	Living things and their habitats <i>Compare life cycles; understand the process and purpose of reproduction.</i>	Animals, including humans <i>Describe changes in humans from birth to old age.</i>
Year 6	Animals, including humans <i>Identify parts of the circulatory system and describe their function; describe the effects of exercise and drugs on the body.</i>	Electricity <i>Describe the association of brightness and voltage; explain variations in function of components; use symbols accurately when drawing circuits; understand and describe the impact of electricity on the environment.</i>	Evolution and inheritance <i>Identify and describe inherited characteristics; understand and describe the process of natural selection; understand evolutionary timescales.</i>	Science Week	Light <i>Explain the formation of shadows and changes in size; describe the behaviour of light on reflective surfaces.</i>	Living things and their habitats <i>Understand the purpose of classification; identify helpful and harmful fungi and microbes and describe examples of both.</i>