

Science Topics						
	Autumn		Spring		Summer	
	<p align="center">Early Years</p> <p>Scientific enquiry is introduced through child-led exploration, play and activities. Children are encouraged to ask questions about how things work, sort objects, investigate the properties of sand, water, dough and other materials as well as explore magnets. They make use of the wildlife area and the outside play area by listening to sounds, looking for minibeasts, noticing plants and observing seasonal changes. They find out about animals of interest, including pets and how to take care of them. The children find out about healthy foods, snack provides the opportunities to try new foods and discuss their nutritional value. Children are taught how, why and when you should wash your hands. Each year, the children get involved with science week, related topical activities. Enrichment activities include themed learning opportunities in the wildlife area, a visit from a farm and living eggs.</p>					
Nursery	Children are given opportunities to explore our natural world and a range of resources through themes including farms, seasons, ourselves, healthy choices.					
Reception	Children are presented with resources and books which extend their knowledge of the natural world and promote questioning and discovery, focusing on themes including, ourselves, habitats, environments and life cycles. They will be given opportunities to make observations about growth and change, such as decaying.					
Year 1	<p align="center">Everyday Materials</p> <p>Identify a variety of everyday materials. Through investigation, compare and group materials based on their physical properties.</p>		<p align="center">Animals, including humans</p> <p>Name, describe and compare the structure of a variety of common animals. Identify some animals that are carnivores, herbivores and omnivores. Become familiar with the basic parts of the human body and the five senses.</p>		<p align="center">Plants</p> <p>Identify and describe the basic structure of some wild and garden plants, including trees.</p>	
	<p align="center">Seasonal Changes</p> <p>Observe changes across the four seasons including the associated weather and how day length varies.</p>					
Year 2	<p align="center">Living things and their habitats</p> <p>Classify things according to whether they are alive. Name a variety of plants and animals in their habitats and explain how that habitat is suited to them. Discover how plants and animals rely on each other using the idea of a simple food chain.</p>		<p align="center">Animals, including humans</p> <p>Describe the basic needs of animals to survive, including the importance for humans to exercise, eat a balanced diet and to practice good hygiene. Know that animal offspring grow into adults.</p>		<p align="center">Plants</p> <p>Observe and describe how seeds and bulbs grow into mature plants. Through investigation, describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	
	<p align="center">Uses of everyday materials</p> <p>Investigate the suitability of a variety of everyday materials for particular uses. Find out how the shape of some objects can be changed.</p>					
Year 3	<p align="center">Rocks</p> <p>Investigate the physical properties different rock types and describe how fossils are formed. Recognise that soils are made from rocks and organic matter.</p>	<p align="center">Forces and Magnets</p> <p>Compare how objects move on different surfaces. Identify magnetic objects and materials, understand that magnets have two poles that repel or attract.</p>	<p align="center">Plants</p> <p>Describe the functions of the main parts of a flowering plant and their requirements for growth. Investigate how water is transported and the role of flowers.</p>	<p align="center">Animals, including humans</p> <p>Understand that animals, including humans, cannot make their own food. Find out the types of food that humans require for nutrition.</p>	<p align="center">Animals, including humans</p> <p>Research how humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p align="center">Light</p> <p>Recognise some light sources and why you should protect your eyes from the sun. Investigate how light is reflected, how shadows are formed and how their size can change.</p>
	<p align="center">Plants</p> <p>Consolidate knowledge of flowering plants by growing specimens from bulbs, observing changes over time and identifying the different parts of a flower first-hand.</p>					
Year 4	<p align="center">States of matter</p> <p>Compare and group solid, liquid and gaseous materials. Observe that some change state when they are heated or cooled, measuring the temperature at which this occurs. Find out how evaporation and condensation drive the water cycle.</p>	<p align="center">Sound</p> <p>Associate sound to vibrations that travel to the ear and that it gets fainter further away from the source. Spot patterns between the pitch and volume of sound with the strength of the vibrations and the type of object that produced it.</p>	<p align="center">Animals, including humans</p> <p>Describe the basic parts of our digestive system. Construct and interpret food chains, identifying producers, predators and prey.</p>	<p align="center">Electricity</p> <p>Construct a simple series circuit, naming its basic parts, finding out the purpose of switches and discovering that a complete loop with a battery is required to power a lamp. Recognise some common conductors and insulators.</p>	<p align="center">Living things and their habitats</p> <p>Group living things in a variety of ways and learn how to use classification keys. Recognise that environments can change, which can sometimes pose dangers to living things.</p>	<p align="center">Animals, including humans</p> <p>Describe the simple functions of the different types of human teeth.</p>
	<p align="center">Living things and their habitats</p> <p>Build upon knowledge of classification keys to identify plants and animals common to local habitats and microhabitats, linking this to how they are suited to their environment.</p>					