



**Curriculum Overview for Science
Academic Year 2019-20**

Subject	Autumn	Spring	Summer
Nursery Knowledge and Understanding	<p>Has a sense of immediate family and relations?</p> <p>To understand that some places are special to different people and be able to describe some features of a special place</p> <p>In pretend play, imitates everyday actions and events</p> <p>To discuss how objects / artefacts can remind us of people / places / stories / events that are important to us</p>	<p>Notices detailed features of their local environment</p> <p>To begin to understand that people celebrate in different ways to show who they are and where they belong</p> <p>Can talk about some of the things they have observed such as plants, animals etc.</p> <p>To talk about groups they belong to and are aware that other children belong to different groups.</p>	<p>Developing an understanding of growth, decay & changes over time</p> <p>To develop respect for their own cultures and beliefs, and those of other people</p> <p>Remembers and talks about significant events in their own experience</p> <p>To be able to suggest why a religious artefact might be special.</p>
Reception Understanding the World	<p>Talk about their families</p> <p>Comments and asks questions about aspects of their familiar world such as the place where they live or people that help us.</p> <p>Celebrating other cultures</p> <p>Observing seasonal changes</p> <p>Christmas</p> <p>Remembers and talks about significant events in their own experience. (A1)</p> <p>Recognises and describes special times and events for family and friends. (A2)</p>	<p>Chinese new year (25th Jan 2020)</p> <p>Easter</p> <p>Mother's day</p> <p>Watching caterpillars/butterflies grow and change</p> <p>Exploration of minibeasts – building a bug hotel</p> <p>Comments and asks questions about aspects of their familiar world (Sp1)</p> <p>Looks closely at similarities, differences, pattern and change (sp2)</p>	<p>Father's day</p> <p>Children know about similarities and differences in relation to places, objects, materials and living things</p> <p>To select and use technology for particular purposes</p> <p>Transition to Year one</p> <p>ELG People and communities (Su1)</p> <p>ELG The World (Su2)</p>
Year 1	<p>Materials- Identifying, describing and sorting materials</p> <p>Seasonal changes- Changes in tree, environments and clothing</p> <p>Working Scientifically- Observations and simple tests.</p>	<p>Animals- Identifying a variety of animals: Fish, amphibians, reptiles, birds and mammals.</p> <p>Observing seasonal changes in plants and seasonal changes from winter to spring.</p> <p>Working Scientifically- Identify and classify animals.</p>	<p>Plants- Identifying basic structure of plants and names of variety of common plants including deciduous and evergreen trees.</p> <p>Observing seasonal changes from spring to summer.</p> <p>Working Scientifically- Comparing day length</p>

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Year 2	<p><u>Living things and their habitats</u></p> <ul style="list-style-type: none"> • Explore and compare the differences between things that are living, dead, and things that have never been alive. • Identify and name a variety of plants and animals in their habitats. <p><u>Uses of everyday materials</u></p> <ul style="list-style-type: none"> • Distinguish between an object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p><u>Animals including humans</u></p> <ul style="list-style-type: none"> • Notice that animals, including humans, have offspring which grow into adults. • Describe the basic needs of animals, including humans, for survival (water, food and air) • Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. 	<p><u>Plants</u></p> <ul style="list-style-type: none"> • Observe and describe how seeds and bulbs grow into mature plants. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. <p><u>Investigation</u></p> <ul style="list-style-type: none"> • Asking simple questions and recognising that they can be answered in different ways. • Using simple equipment • Performing simple tests. • Using their observations and ideas to suggest answers to questions.
Year 3	<p style="text-align: center;">Light</p> <p>Learn how light travels and investigate how shadows.</p> <p style="text-align: center;">Muscles and the skeleton.</p> <p>Name and identify the purpose of muscles and skeletons in the human body.</p>	<p style="text-align: center;">Rocks and Soils</p> <p>Identify and classify different types of rocks and understand how fossils are formed.</p> <p style="text-align: center;">Forces and Magnets</p> <p>Investigate how magnets attract and repel and learn about gravity, friction and resistance.</p>	<p style="text-align: center;">Plants</p> <p>Investigate what plants need in order to grow and name the parts of a plant and their function. Learn about the life cycle of a plant and how plants produce seeds.</p>
Year 4	<p>Animals including humans – Digestion system, teeth and food chains</p> <p>Sound – Vibrations, distance affecting sound and patterns</p>	<p>States of matter – gases, solids and liquids and changing between states. Cooling and heating</p> <p>Electricity – Different conductors, circuits and components. Series and simple circuits.</p>	<p>Living things and their habitats – How living things can be grouped, how environments change, classification keys.</p>
Year 5	<p style="text-align: center;">Earth and space:</p> <p>To identify and understand: The planets, the moon, the sun, the four seasons and day and night.</p>	<p>Properties and changes of materials: Comparing materials, thermal conductors and insulators, separation techniques, reversible and irreversible changes.</p>	<p style="text-align: center;">Animals including humans:</p> <p>Human circulatory system, heart, blood vessels and blood.</p> <p>The impact of diet, exercise, drugs and</p>

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	<p>Forces: The effects, measuring force, gravity, friction, water resistance and air resistance. Scientific investigation.</p>	<p>Variables. Scientific investigation.</p>	<p>lifestyle. Nutrients and water transportation. Living and growing: Classifying plants, animals and micro-organisms. Similarities and differences.</p>
Year 6	<p>Evolution and Inheritance – learning about offspring produced by sexual and asexual reproduction. Animal and plant adaptation. The use of fossils and the work of key research scientists</p> <p>Light - Looking at the path of light and shadows, reflection and refraction, scientific thinking. The absence of light.</p>	<p>Electricity – component symbols, types of circuits and components. Linking brightness of a bulb to number and voltage of cells. Control technology.</p>	<p>Animals including Humans – Looking at the function of the heart and other organs. The different structures within the heart and lungs. Impact of diet and lifestyle. Nutrient and water transportation.</p> <p>Living things and their Habitats – classification of living groups based on characteristics Further discussion on Reproduction</p>