



<u>Aims</u>	<u>Big Ideas</u>	<u>Content and Sequencing</u>
<p>For all pupils to: Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future. Use real life contexts, wherever possible and making use of the outside space to enrich learning.</p>	<p>Finding out about the world around them both human and man-made. Experience and observe. Develop curiosity. Ask questions. Test ideas, record results, work scientifically, use equipment. Find out about Scientists. To work scientifically.</p> <p><u>Biology</u> (Living things.) Animals, including humans, plants, and habitats. Evolution and Inheritance.</p> <p><u>Chemistry</u> (All the matter in the universe.) Materials, rocks, states of matter, changing materials.</p> <p><u>Physics:</u> (Forces, matter and energy.) Electricity, light, forces, earth and space, sound, seasonal changes, forces and magnets.</p>	<p>EYFS <u>YR</u> In our Reception Class, Science is broadly taught through ‘understanding the world’. The children talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes. What is covered depends on the interests of the children.</p> <p>KS1 <u>Y1</u> Plants, (identify and name some plants and trees.) Animals, including humans (Identify and name some common animals.) Every day materials, (identify and name some everyday materials.) Seasonal Changes.</p> <p><u>Y2</u> Living Things and their Habitats, (explore living, dead and never been alive, habitats, simple food chains.) Plants (describe what plants need in order to grow.) Animals including Humans (describe the basic needs of humans including food, hygiene and exercise.) Uses of Everyday materials (Compare the suitability of different types of materials.)</p> <p>KS2 <u>Y3</u> Plants (describe the functioning parts and life cycles.) Animals including Humans (Nutrition, skeletons, muscles.) Rocks (appearance and properties, fossils), Light (reflections, shadows), Forces and Magnets (grouping and comparing magnetic materials),</p> <p><u>Y4</u> Living Things and their Habitats (grouping living things, using classification keys, digestion, teeth, food chains), States of Matter (grouping and comparing solids, liquids and gasses), Sound and Electricity.</p> <p><u>Y5</u> Living Things and Their Habitats (life cycles of plants and animals.) Animals Including Humans (changes in humans.) Properties and Changes of Materials (reversible and irreversible Changes.) Earth and Space (the solar system.)</p>

		<p>Forces (explain and identify different forces, such as gravity). <u>Y6</u> Living Things and Their Habitats (classifying based on characteristics.) Animals including Humans (the circulatory system, diet, lifestyle Choices.) Evolution and Inheritance (how living things have changed over time, use evidence from fossils and how plants and animals have adapted over time.) Light (how it travels, shadows), Electricity (making and representing circuits.) Working Scientifically runs throughout all topics and is monitored in classroom observations.)</p>	
<p><u>Links with other subjects</u></p> <p>Maths – collecting, presenting and analysing data, measuring and recording results. Spoken language – developing scientific vocabulary. Forest School- naming plants, trees, animals. Habitats, food chains. PSHRE – diet, lifestyle, exercise, keeping healthy, relationships. Music – sound.</p>	<p><u>Retrieval practice</u> (at age appropriate points)</p> <p>KS1 &2 use simple scientific language. Name birds, animals, plants, trees. Use scientific language to describe types of materials and their properties. To name body parts Describe changes in the seasons. Describe life cycles Name a scientist that they have found out about. KS2 read and spell scientific vocab correctly. Describe rocks and soils. Notice patterns, similarities, differences and use this for grouping. Discuss human impact on the world. Discuss the digestive system. Solids, liquids and gases. Circuits. UKS2 – justify ideas, pronounce scientific words correctly.</p>	<p><u>Progress</u></p> <p>See spread sheet to show where each of the study programmes follow on from each other, when they were previously taught and when they will be taught next. Units of learning in each Core Theme build on previous learning. Teacher’s will know when each topic was last taught and use this to base their cold task activity around. Key language builds on previous language used within each theme. Key skills build upon previous skills learnt within each theme. Assessment of the progress in this subject is based on book looks using the cold and hot tasks. L.O’s allow opportunities for self-assessment. Working scientifically is monitored through classroom observations. Where children find areas difficult further support will be given.</p>	<p><u>Support and Challenge</u></p> <p>All pupils access the Science curriculum. Equipment and resources are available for each topic. Use of practical materials and real life contexts. Where appropriate, adaptations are made to ensure inclusivity. Opportunities for questioning, justifying ideas, testing and explaining are actively encouraged.</p>