



love the journey

Curriculum Implementation 2024-25

Primary

LCA Strand	Science
Subject	Science

<p>What are the key concepts taught?</p>	<p>In EYFS, the science curriculum focuses on developing key skills that are needed to progress in science, including observation skills sorting based on characteristics and learning about how their bodies work.</p> <p>In Key Stage 1, the science curriculum is focused on developing the children's understanding of the world around them and beginning to develop key scientific skills. Pupils are taught to develop skills such as observation, communication of ideas and critical thinking skills.</p> <p>Pupils in lower Key Stage 2 will build on the skills taught in Key Stage 1, progressing by exploring, asking and answering questions and gaining new knowledge through practical experiments. Pupils will be working scientifically and using the correct scientific vocabulary.</p> <p>Pupils in upper Key Stage 2 will focus on developing a deeper understanding of a wide range of scientific ideas and will use a range of methods to develop their knowledge. These include taking measurements, using a range of scientific equipment, planning their enquiries to answer questions, controlling variables and concluding their experiments to see if their predictions were correct.</p>
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<p>What is the sequencing of units?</p>	<p>EYFS Unit 1 - Autumn Unit 2 - Everyday Materials Unit 3 - Animals Unit 4 - Human Life Cycle Unit 5 - Plants Unit 6 - Animals and their Habitats</p> <p>Chapter 1 Unit 1 – Plants</p>
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Unit 2 – Human Body Parts
Unit 3 – Everyday Materials
Unit 4 – Animal Groups
Unit 5 – Animal Diets
Unit 6 – Seasonal Changes

Chapter 2

Unit 1 – Living things and their habitats
Unit 2 – Materials
Unit 3 – Growth and Survival
Unit 4 – Plants
Unit 5 – Super Scientists
Unit 6 – Awe and Wonder

Chapter 3

Unit 1 - Plants
Unit 2 - Rocks
Unit 3 - Light
Unit 4 - Animals including Humans
Unit 5 - Forces and Magnets
Unit 6 - The Bee Project

Chapter 4

Unit 1 - States of Matter
Unit 2 - Animals including Humans
Unit 3 - Sound
Unit 4 - Living things and their Habitats
Unit 5 - Electricity
Unit 6 - The History of Science

Chapter 5

Unit 1 - Properties and changes of materials
Unit 2 - Animals including Humans
Unit 3 - Forces
Unit 4 - Living things and their Habitats
Unit 5 - Earth and Space
Unit 6 - The Scientific Method

Chapter 6

Unit 1 – Animals including Humans
Unit 2 – Science of Light
Unit 3 – Electrical Circuits
Unit 4 – Evolution and Inheritance
Unit 5 – Classifying Living Things
Unit 6 – Preparing for Secondary Science

How do we encourage pupils to see the links between different units and concepts?

The spiral curriculum allows pupils to revisit key scientific concepts throughout their education to build on previous knowledge. Working scientifically is built upon from key stage 1 to upper key stage 2. Pupils start with basic observations in EYFS and progress to looking at cause and effect, gradually advancing to more detailed conclusions based on observations and conducting their own experiments where they can manipulate their own variables to record results.

<p>What are the planned opportunities for adaptive teaching, including for SEND, the more and able and disadvantaged pupils?</p>	<p>Equipment is available to model an abstract concept, allowing pupils to visualise concepts they may struggle to understand.</p> <p>The focus is ensuring that we maintain high expectations for the successful completion of experiments by all pupils, with scaffolding where necessary.</p>
<p>What are the planned opportunities for retrieval and reflection by pupils?</p>	<p>Pupils have quiz questions at the start of each lesson, providing opportunities for pupils to retrieve knowledge previously taught. At the end of each unit, pupils have an assessment task to bring together knowledge from the whole unit and apply it to a particular activity. Assessments are 'spaced' meaning that information from earlier units is included in assessment tasks.</p>
<p>What are the opportunities for feed forward by the teacher post assessment outcomes?</p>	<p>Following on from each assessment point, pupils have opportunities to answer questions from past topics that they have not mastered previously.</p> <p>Pupils are encouraged to link their knowledge from previous topics, both from the same academic year and previous academic years.</p>
<p>What are the planned opportunities for developing Reading?</p>	<p>In science, pupils have the opportunity to answer five comprehension questions linked to the current topic. The use of the booklets allows pupils to search for their own information when answering questions for their own work, therefore allowing pupils time to practise scanning techniques when finding information.</p>
<p>What are the planned opportunities for developing literacy, numeracy, oracy and SMSC?</p>	<p>Literacy: Pupils are answering questions in full sentences and are working towards a cohesive piece of text when writing up their experiments and reporting on research that they have carried out.</p> <p>Numeracy: Pupils have the opportunity to read graphs, and interpret data that they have collected and that others have collected.</p> <p>Oracy: Pupils have many opportunities to demonstrate their understanding when giving short presentations, for example on their knowledge of the water cycle. They are given time to vocalise their ability to use scientific vocabulary in explanations for certain topics.</p> <p>SMSC: Pupils of all years have opportunities to think about living things and their habitats, focusing on the moral decisions in science and asking questions such as 'Is it right if a human destroys a creature's habitat?'. They are encouraged to be</p>

	<p>responsible when carrying out investigations and being considerate of their environment. Pupils have many opportunities to work together to develop their social skills; children need to discuss ideas and understand that others may have different theories.</p>
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