



LAWFORD MEAD PRIMARY SCHOOL SUBJECT OVERVIEW

Science

Intent

What we want our children to learn.

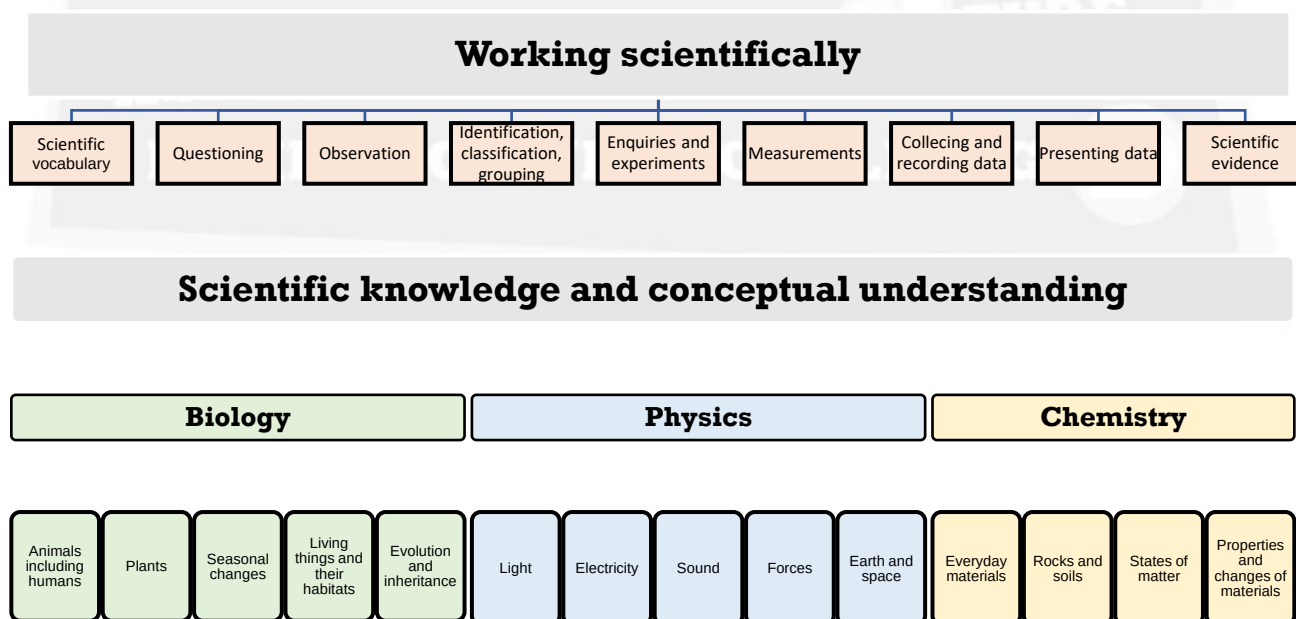
Our Science curriculum aims to:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics via practical, creative, written and outdoor learning activities.
- Develop working scientifically skills through an enquiry-based approach including research, observation, experimentation and investigation.
- Allow children to be inquisitive by asking and answering questions and discover the world around them through exploration.
- Develop passion for science by promoting awe and wonder and making lessons engaging and relevant to our cultural capital.
- Preparing learners for the future by equipping them with the scientific knowledge required to understand the uses and implications of science today and for the future. This includes encouraging thinking outside the box, problem-solving skills and empathy for nature and the environment.
- Ensure children meet the Key Stage Attainment targets of the National Curriculum.
- Be accessible, engaging and challenging for all, regardless of circumstances or background.

Implementation

How we deliver that learning.

Our curriculum design:



- We use National Curriculum Science programmes of study: Key Stage 1 and 2 and the Understanding the World area of learning in EYFS: see [Science in the EYFS](#).
- There are two strands studied throughout our Science curriculum in Key Stage 1 and 2 – working scientifically, and scientific knowledge and conceptual understanding.
- Scientific knowledge and conceptual understanding is taught discretely and across the curriculum by a topic-based approach that builds on prior learning.
- Working scientifically is taught in every science lesson by ensuring scientific knowledge and conceptual understanding via an enquiry-based approach.
- This spiral curriculum provides a strong progression of knowledge and skills. Prior learning is revisited, built upon, and deepened each year: see [Science Curriculum Document](#).
- Lessons open with 'Do Now' retrieval questions to recall and make connections to prior learning.
- Class teachers use adaptive teaching to ensure that lessons can be accessed by all pupils. This includes pre-teaching new vocabulary, using pictures or diagrams to record ideas, step by step instructions (including pictorial) and additional scaffolding. Teachers stretch pupils' learning when required.
- Enrichment activities offer further opportunities to explore Science including school trips, school visitors and enrichment days.

Our teaching and learning:

- Science is taught weekly for at least one hour per week, but aims to be 1 hour and a half in Key Stage 2.
- In EYFS, science is taught via continuous provision based on their current topic by exploratory play.
- Lessons incorporate a range of teaching strategies to appeal to all learners: class discussion, practical investigations and explorations, independent tasks, paired, and group work.
- Science books are used to record the children's learning.
- Topic-specific vocabulary is explicitly taught and explained; this vocabulary will be discussed every lesson and will be displayed on the Science working wall to scaffold learning. See [Science Vocabulary Progression Document](#).

Impact

How we know what children have learnt and how effective this has been.

Our children:

- Enjoy participating in Science lessons.
- Children will be able to take part in enquiry through investigation and exploration, demonstrating they are inquisitive and able to ask and answer questions.
- Children will be able to think scientifically and develop their reasoning skills in order to challenge pre-conceived ideas.
- Children will discover the world around them and through cross-curricular opportunities, children will increase their scientific knowledge.
- Children will develop a passion for learning about the scientific world, enhancing their creativity by thinking outside the box and promoting a sense of 'awe and wonder'.
- Children will be prepared for the future by developing specific skills needed for life.
- Children will take risks and develop a 'can-do' attitude, becoming resilient when solving problems and evolving into confident scientists.
- Meet the end of Key Stage Attainment Targets outlined in the National Curriculum for Science, demonstrating a clear progression of knowledge and technical skills in this subject.

Our teachers:

- Use formative and summative assessment opportunities to review pupil progress: AfL, high-quality questioning and post-assessment quizzes.
- Use assessment statements to determine which children are working at expected, with general supporting guidance to assess children at working below, working towards, working at expected, and working above. Teachers record this assessment half-termly on Insight: see [Science Curriculum Document](#).
- Work with the Science subject leader to identify children who require further support and those who require further challenge.

Our Science subject leader:

- Supports teachers in the delivery of Science by offering continuing professional development, guidance and support where needed.
- Works with teachers to monitor pupil progress termly; the Science subject leader advises teachers to ensure that children who are not meeting age-related expectations are effectively supported.
- Evaluates the effectiveness of teaching and learning (pupil voice, book looks, informal drop-ins, and team teaching) and acts on this accordingly.

Updated December 2024

WE ARE PROUD!

PASSION FOR LEARNING
INTEG**R**ITY IN OUR ACTIONS

RESPECT **F**OR OTHERS

ASPIRATION FOR THE **F**UTURE

RESILIENCE WHEN CHALLENGE**D**