



Science Policy

Amendments made since last review: Summer 2020 - Updated aims to linked to the intent of Science curriculum and planning guidance (due to two-year rolling programme). Spring 2024 – policy amended to include 3 I statements – intent, implementation and impact	
Policy agreed / reviewed: 19 th March 2024	Next review due: Spring 2026
Signed on behalf of the Governing Body:	Signed by Head Teacher:

Intent:

At Longton Lane Primary School, pupils will build up a body of key scientific knowledge and concepts whilst also recognising the power of rational explanation and develop a sense of excitement and curiosity about the natural phenomena. They will be encouraged to work scientifically throughout a range of different scientific concepts (biology, chemistry and physics) to help them to understand the world around them. All pupils will be taught essential aspects of the knowledge, methods, processes and uses of science (in both their daily lives and the wider world). Science draws upon other disciplines such as mathematics, English, computing and DT, using transferrable vocabulary and skills to ensure a deeper understanding.

Aims:

To prepare our children for life in an increasingly scientific and technological world today and in the future.

- To help our children acquire a growing understanding of the nature, processes and methods of a range of scientific ideas.
- To encourage and build on our children's natural curiosity and developing a scientific approach to problems.
- To develop the attitudes of open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- To provide science education which will be challenging to all pupils and ensure equality of opportunity
- To develop the use of scientific language, recording and techniques.

Implementation:

National curriculum topics are taught (and where appropriate segmented) into specific half terms throughout each academic year; allowing progression of year groups and key stages. Throughout KS1 and KS2, Science is taught consistently, once a week for up to two hours. Science in EYFS is taught through topics as part of the 'Understanding of the World' strand. Scientific enquiry skills are embedded in each topic, the children study and these topics are revisited and developed.

From Y2-Y6 there is additional time given during Science lessons in autumn term for teachers to revisit any misconceptions or gaps in previous year's learning. This model allows children to build upon their prior knowledge and increase their enthusiasm for the topics whilst embedding procedural knowledge in their long-term memory.

Children are taught how to develop and use a range of skills including observations, planning and investigations and become independent learners by exploring possible answers for their own scientific based questions.

Agreed non-negotiables and a vocabulary list are in place for each year group.

Children are progressively taught how to record their investigations. Scientific enquiry underpins each topic taught so that children learn how to use a variety of approaches to answer scientific questions.

Broad Guidelines:

- Our Science curriculum celebrates the impact of significant individuals.
- All lessons will be delivered in line with school's health and safety policy and ongoing risk assessed by teachers.
- British values of respect, tolerance and democracy are threaded through our Science curriculum.
- Teachers use a variety of resources to plan and deliver lessons.
- Whilst basic skills are a part of every lesson, they must not override the scientific focus of any lesson.
- Each lesson must allow opportunities for pupils to use their speaking and listening skills.
- At the end of each topic, Science knowledge is assessed in the form of 'sticky knowledge questions'.
- Staff use the Science long term planning documents to plan medium and short term, which indicate key questions, vocabulary and linked activities that build knowledge and skills for the Science unit.
- Short term planning allows for appropriate differentiation to be planned for, if relevant and any AfL opportunities.
- Feedback and marking booklet support the process of immediate responsive teaching.
- Children's Science learning journey is recorded in a Science book.
- Subject leader will monitor Science across school in the form of; pupil voice, data analysis, book scrutinies, resource monitoring and staff feedback.

Impact

Children will show enjoyment about science and the scientific knowledge they have acquired.

Children will understand scientific processes and the uses and implications of Science in the wider world.

Children will be able to apply their scientific knowledge to investigations and real-life problems and use their investigation skills to independently.

Children will know more, remember more and understand more about Science and be able to demonstrate this knowledge.

Children will make progress and attain in line with age related expectations.