

INGLEBY MILL PRIMARY SCHOOL



Science Policy

October 2022

Mr N Robinson
Due to be reviewed October 2024



Imagine
Make a Difference
Persevere
Succeed

At Ingleby Mill, we aim to ensure that our whole community provides children with the opportunity for growth and development through the acquisition of skills, attitudes and knowledge in a safe, encouraging and sometimes challenging environment.

Science at Ingleby Mill Primary School

What do we want our children to learn?

At Ingleby Mill Primary School, we believe that science contributes significantly to all aspects of life and, as science is a core subject within the National Curriculum, we give it the attention it requires.

Working scientifically helps children to deepen their knowledge and understanding of the world around them whilst encouraging an inquiring attitude. At Ingleby Mill Primary School, we believe that the teaching of science develops in children an interest and curiosity about the world in which they live, fosters in them a respect for the environment and promotes thinking skills and problem solving.

At Ingleby Mill Primary School our science teaching gives children the opportunities to:

- develop scientific knowledge through the disciplines of Biology, Chemistry and Physics;
- understand different types of scientific enquiry and choose the appropriate method to help them answer questions about the world around them;
- gain scientific enquiry skills to help deepen their understanding of the science they are learning;
- learn about the use and implications of science within the world around us and how it has developed over time;
- use appropriate scientific vocabulary to explain their predictions, methods, results and conclusions;
- explore different methods to communicate what they have learned during their enquiry including the use of ICT;
- learn the correct use of the scientific equipment and materials they handle and develop a respect for safe use;
- develop an enthusiasm and enjoyment of scientific learning and discovery.

The National Curriculum provides a structure of the science curriculum being taught throughout Ingleby Mill Primary School. Each topic taught in science has been carefully

linked, where possible, to the theme taught in that year to provide children with a comprehensive programme of study.

At Ingleby Mill Primary School:

In Early Years, science is experienced through several areas of learning.

Communication and language where children learn to ask questions about what is around them, explore new vocabulary and articulate their ideas and thoughts.

Physical development where children learn about healthy choices including food and exercise.

Understanding the world where they explore the world around them through their senses, recognise differences in environments and how the world changes through the seasons.

In Key Stage 1 and 2, children will have weekly science lessons using various approaches and resources. Additional opportunities are provided to our children, such as educational visits linked to current topics, science days/week and visitors coming in to talk with children.

Overview of units covered:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Everyday materials		Animals, including humans		Plants / seasonal changes	
Year 2	Animals, including humans	Living things and their habitats	Working scientifically / everyday materials		Plants	
Year 3	Rocks		Light	Plants	Forces and magnets	Animals, including humans
Year 4	Electricity	Sound	States of matter		Animals, including humans	Living things and their habitats.
Year 5	Living things and their habitats		Earth and space	Forces	Everyday materials	
Year 6	Evolution and inheritance	Living things and their habitats.	Animals, including humans		Light	Electricity

Comprehensive curriculum planning is provided for teachers which builds on previous knowledge and learning. This ensures that where themes are repeated, progression and continuity is secured.

How we will do this?

Teachers will create a positive learning attitude towards science by teaching in ways that are imaginative, purposeful, well managed and enjoyable. They will encourage children to achieve high standards and provide plenty of opportunities for children to deepen their understanding through practical activities.

Our whole school approach to the learning of science:

- Science will be taught in an arranged sequence to match other learning topics. This will allow children to achieve a greater depth of knowledge by making links within their learning.
- Within most sequences of lessons, children will be given opportunities to apply their learning by solving problems. Children will be presented with a problem and are encouraged to ask a wide variety of questions and then plan their own investigations to answer their questions.
- Engaging lessons will be planned and include the use of high-quality resources to deepen their understanding of certain concepts.
- Teachers will use open-ended and specific questions to test understanding and identify those children who have gaps in their learning, so all children make progress.
- Where possible, we build upon the learning and skills gained in previous years. As children gain more experience with scientific enquiries, they become more confident in asking questions, selecting appropriate scientific equipment, collecting results, drawing conclusions from their results and presenting their findings.
- Working scientifically is embedded into lessons to ensure that these skills are developing along with their knowledge and understanding.
- Scientific vocabulary is used and encouraged in all aspects of the lesson.
- Teachers utilise local outdoor learning opportunities as much as possible in order to develop children's understanding.

What impact will it have?

The practical and thematic approach to science at Ingleby Mill Primary School provides our children with an engaging and high-quality science education that allows them to begin to understand the world around them. We provide children with a variety of opportunities to experience science in many different forums such as trips, workshops, interactions with experts as well as our own wildlife habitat etc. This allows our children to learn the importance of science in our daily life and our future. Pupil voice is used to further develop the science curriculum. Through feedback we can use pupils' attitudes towards science to adapt our approach to ensure all children are motivated learners.

Health and Safety

- Risk assessments, as appropriate, will be made, as part of the planning process regarding science activities.
- Children are taught about being safe before handling objects/equipment and will be taught to identify risks themselves.
- Use of scientific equipment and materials will be modelled by the teacher so children are seeing best practice.
- Safety glasses, gloves and overcoat or apron to be worn when appropriate.