Science Curriculum

Intent

At Lyngford Park Primary School, we want every child to develop a sense of excitement, curiosity, and wonder about the world around them. As children progress through the school, they will deepen their substantive knowledge across the three core areas of science: Biology, Chemistry, and Physics.

As the children's journey takes them through the school, they build on prior learning through a carefully planned spiral curriculum delivered via a 2-year rolling programme. By systematically revisiting key topics, our teachers ensure that children are taught with greater depth and broader complexity, creating direct links to prior knowledge and securing progression.

Implementation

Children build their knowledge and understanding through rich practical experiences, purposeful scientific questioning, and active enquiry. We encourage children to ask questions, explore ideas, and use evidence to develop rational explanations for the world around them.

Because Science is a practical and investigative subject, we ensure disciplinary enquiry skills are embedded throughout the curriculum rather than taught in isolation. Lessons are carefully designed to be accessible to all children, fostering confident, curious, and enthusiastic young scientists who are prepared for the next stage of their education.

Through our oracy-enabled lessons, children have regular opportunities to debate ideas with their peers and develop their formal scientific vocabulary. This collaborative approach deepens understanding and allows teachers to immediately address misconceptions. Furthermore, regular retrieval-style questioning and low-stakes testing are utilized to secure key concepts into pupils' long-term memory. Formative assessment is conducted dynamically throughout lessons to gauge understanding, adapt teaching, and record progress for future reference.

Impact

The impact of our curriculum is tracked robustly through continuous formative assessment, rigorous work scrutiny, and pupil voice. Children are assessed against both the knowledge and the specific enquiry skills integrated into each lesson.

The ultimate outcome of our curriculum is a confident and competent scientist who can fluently combine academic understanding and scientific vocabulary with practical independence, demonstrating a readiness to explore the wider world.

EYFS

The Natural World

- Weather and seasonal changes
- Floating and sinking
- Animals and habitats
- Light and shadows

Children will explore and develop their curiosity though real-life experiences. Through these topics, we build a foundation of understanding of both scientific vocabulary and experimentation, ready to progress into Key Stage 1.

Key Stage 1

- Plants
- Animals (including humans)
- Everyday materials
- Weather and seasonal changes
- Living things and their habitats

Children explore how plants and animals grow and survive, investigate the properties of different materials and develop their understanding of weather and seasonal changes.

Lower Key Stage 2

- Plants
- Animals (including humans)
- Rocks
- Light
- Forces and magnets
- Living things and their habitats
- States of matter
- Sound
- Electricity

Children develop their understanding of how plants adapt, how sound and light travel, how forces and magnets work, how materials can be selected and sorted, and how rocks and soils can be investigated.

Upper Key Stage 2

- Living things and their habitats
- Animals (including humans)
- Properties and changes of materials
- Earth and Space
- Forces
- Evolution and inheritance
- Light
- Electricity

Children develop their understanding of puberty and reproduction in humans, how humans and animals have adapted, how electricity works and the solar system.