

**Curriculum Intent**

At our school, science teaching and learning follows the National Curriculum and aims to provide all pupils with the foundations for understanding the world. We want our children to develop a sense of excitement and curiosity about the world around them, and to be equipped with the skills and knowledge to explore, question, and make sense of what they see.

Our intent is to:

- Build secure scientific knowledge and understanding across a carefully sequenced and progressive way.
- Develop children's skills of working scientifically, enabling them to ask questions, plan and carry out investigations, observe carefully, collect and interpret data, and use evidence to explain and justify their ideas.
- Make meaningful links between science learning and children's everyday experiences, the wider curriculum, and the world around them.
- Encourage curiosity and wonder, fostering positive attitudes to learning through practical, hands-on experiences that spark enthusiasm and engagement.
- Teach the importance of evidence and reasoning, helping children to develop critical thinking and problem-solving skills that will serve them throughout life.
- Highlight the impact of science on our lives and future, including an awareness of environmental issues, scientific discoveries, and potential career pathways.
- Ensure that all children, regardless of background or starting point, can achieve and succeed, with appropriate support and challenge to deepen their understanding.

By the time children leave primary school, they will have a strong foundation of scientific knowledge and skills, the confidence to ask questions and seek answers, and the curiosity to continue exploring the world as young scientists at secondary school and beyond.

**Curriculum Implementation**

We implement our science curriculum through a carefully sequenced programme of study, ensuring progression of knowledge, skills, and vocabulary across all year groups in line with the National Curriculum. Our approach combines direct teaching of key scientific concepts with opportunities for practical exploration and enquiry, enabling pupils to deepen understanding through hands-on experiences.

How we implement science in our school:

- Long-term and medium-term planning ensures full coverage of the National Curriculum, with clear progression of knowledge and skills from Early Years through to Year 6.
- Knowledge is taught progressively, revisiting and building on prior learning to secure strong foundations.

- Working scientifically skills are woven throughout all units, with children learning to ask questions, make predictions, carry out investigations, record results, and draw evidence-based conclusions.
- Practical, hands-on learning is central to our teaching, giving children opportunities to explore, observe, and experiment to develop curiosity and resilience.
- Scientific vocabulary is explicitly taught and regularly revisited, enabling children to articulate their ideas with accuracy and confidence.
- Cross-curricular links are planned where meaningful, particularly with mathematics (data handling, measurement) and English (reading, recording, reporting).
- Use of the local environment and wider community enriches learning, including outdoor learning, trips and links to real-world contexts.
- Assessment for learning is embedded within lessons to identify misconceptions, address gaps, and inform next steps. End-of-unit assessments and retrieval opportunities help consolidate knowledge and track progress.
- Inclusion is at the heart of science teaching, with adaptations and scaffolding to ensure all pupils, including those with SEND, can access and enjoy learning, while providing challenge for higher attainers.
- Enrichment opportunities such as a yearly STEM day to develop curiosity, teamwork and a love of science.

Through this consistent and engaging approach, children develop both secure scientific knowledge and the confidence to think and work like scientists.

### **Curriculum Impact**

The impact of our science curriculum is that children leave primary school with:

- Secure scientific knowledge and understanding in line with National Curriculum expectations.
- Confidence and competence in working scientifically, able to plan, carry out, and evaluate investigations with increasing independence.
- The ability to use scientific vocabulary accurately, explaining concepts clearly and applying their knowledge to new contexts.
- Curiosity and enthusiasm for science, demonstrated through questioning, exploring, and making connections beyond the classroom.
- Critical thinking and problem-solving skills, enabling them to evaluate evidence, make informed decisions, and understand the role of science in everyday life.
- An appreciation of the importance of science in society and the environment, developing awareness of issues such as sustainability, health, and technology.
- Readiness for the next stage of education, with a strong foundation for secondary science and the confidence to pursue future STEM learning and careers.

We measure the impact of our curriculum through:

- Ongoing formative assessment within lessons to monitor understanding and address misconceptions.
- Retrieval activities to check knowledge retention and progression.

- Pupil voice discussions to capture enthusiasm, attitudes to learning, and understanding of scientific concepts.
- Book looks, lesson observations, and teacher assessments to ensure consistency and high-quality teaching.
- Tracking of attainment and progress against National Curriculum objectives to ensure all pupils achieve their potential.

Ultimately, the impact of our science curriculum is that children see themselves as scientists: curious, knowledgeable, and equipped with the skills and mindset to explore and make sense of the world around them.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Reception</b>	Body parts and different bodies Senses How have I changed?	Sources of light Signs of Autumn Nocturnal and Diurnal animals Hibernation Habitats	Signs of Winter Changes of state Animals in the Antarctic/animal adaptations		Lifecycles of animals on a farm Growing plants Minibeasts - habitats Minibeasts lifecycle Minibeasts - bees	Space Animals that live in the sea
<b>Year 1</b>	Seasonal changes Animals including humans - Senses		Everyday materials	Plants Animals	Animals Seasonal changes	
<b>Year 2</b>	Living things in their habitats	Animals including humans - Keeping healthy		Everyday materials	Plants	Animals including humans
<b>Year 3</b>	Animals including humans – Nutrition and movement	Forces and magnets		Plants	Light	Rocks and soil
<b>Year 4</b>	States of matter	Teeth and eating, Food chains	Electricity		Sound	Identifying and classifying living things
<b>Year 5</b>	Earth and space		Forces	Properties of Materials		Lifecycles
<b>Year 6</b>	Circulatory system	Evolution and inheritance	Electricity	Classification	Light	