



Intent

At Sharow CE Primary School we believe that science inspires children's natural curiosity and helps them develop an understanding of the world in which they live. We want every child to see themselves as a scientist—asking questions, exploring ideas, making discoveries and using evidence to explain the world around them.

Our science curriculum is delivered through Kapow Primary, providing a carefully sequenced and progressive curriculum that aligns with the high-quality approach we use across our foundation subjects. The curriculum is fully aligned with the National Curriculum and ensures that children develop secure knowledge and understanding across the three scientific disciplines of biology, chemistry and physics, whilst continually building their scientific enquiry skills.

We intend for all pupils to:

- develop a secure understanding of scientific knowledge and concepts through carefully planned progression across each year group;
- become confident in working scientifically by asking questions, making predictions, planning and carrying out enquiries, observing, measuring, recording, analysing and evaluating evidence;
- use and apply ambitious scientific vocabulary accurately to communicate their ideas and reasoning;
- understand how science has shaped the modern world through the work of significant scientists and discoveries;
- recognise the importance of science in everyday life, appreciate its relevance to future careers and develop an understanding of how science helps us care for our environment and God's creation;
- leave Sharow as curious, resilient and reflective learners who can think critically, solve problems and make informed decisions using scientific evidence.

Our curriculum promotes curiosity, respect for living things and the physical environment, encouraging children to become scientifically literate citizens who are prepared for the next stage of their education and for life beyond primary school.

Implementation

Science is taught using the Kapow Primary Science scheme, which provides a coherent sequence of learning that ensures full National Curriculum coverage while building knowledge and skills progressively from Reception to Year 6. Lessons are carefully designed so that children revisit and build upon prior learning, enabling knowledge to move into long-term memory through regular retrieval and meaningful application.

Each unit begins by identifying pupils' existing knowledge and misconceptions, allowing teachers to adapt learning to meet the needs of all learners. Kapow's progressive sequence ensures that substantive scientific knowledge develops alongside disciplinary knowledge, with Working Scientifically embedded throughout every year group rather than taught in isolation.

Children experience a wide range of enquiry types, including:

- observing over time;
- identifying, classifying and grouping;
- pattern seeking;
- comparative and fair testing;
- researching using secondary sources.

Practical investigation lies at the heart of our science curriculum. Children regularly engage in hands-on enquiries using classrooms, the school grounds and the local environment to make learning purposeful and memorable. They are encouraged to ask their own questions, make predictions, collect and interpret evidence, draw conclusions and evaluate the reliability of their investigations.

Scientific vocabulary is explicitly taught, revisited and applied throughout each unit, enabling pupils to communicate their ideas with increasing accuracy and confidence. Teachers use effective questioning, discussion and retrieval practice to deepen understanding and address misconceptions.

Learning is enriched through educational visits, visitors, outdoor learning and links with the wider curriculum wherever appropriate, allowing children to recognise science as an important part of everyday life and the wider world.

Assessment is ongoing and informs future teaching. Teachers use formative assessment, observation, pupil discussion, retrieval quizzes and end-of-unit assessments to monitor progress and ensure children are developing both scientific knowledge and enquiry skills.

Impact

The impact of our science curriculum is seen in children who are enthusiastic, inquisitive and confident learners with a secure understanding of scientific concepts and processes. Pupils make strong progress through the carefully sequenced curriculum, building on prior learning and applying their knowledge in increasingly sophisticated ways.

Children leave Sharow CE Primary School able to think scientifically by asking relevant questions, planning and carrying out enquiries, interpreting evidence, drawing conclusions and communicating their findings using appropriate scientific vocabulary.

They understand the relevance of science in everyday life, appreciate its role in protecting our environment and recognise the contributions of scientists who have shaped our understanding of the world. They are equipped with the knowledge, skills and curiosity needed to succeed in the next stage of their education and develop as informed, responsible citizens.

The effectiveness of the curriculum is monitored through pupil voice, lesson visits, work scrutiny, assessment information and ongoing subject leadership. These processes ensure that science remains engaging, ambitious and inclusive for all learners while maintaining high expectations and continuous improvement across the school.