

SCIENCE



INTENT

Our children will have opportunities to foster curiosity, critical thinking, and a foundational understanding of the natural world. We aim to equip our children with the skills and knowledge to explore scientific concepts through observation, investigation, and experimentation. We will help children understand topics like plants, animals, materials, forces and the environment by supporting them to explore scientific ideas, share their findings and build confidence in their abilities to investigate and learn. We will equip our children with different types of enquiry: comparative/fair testing, research, observation over time, pattern-seeking, problem-solving and identifying, grouping and classifying to support them to be independent and inquisitive about the world they live in.

3D CURRICULUM

Science is not limited merely to subject specific lessons, but threaded through the rest of the curriculum and so is evident within other subjects. Our lessons also incorporate the use of computers, art, DT and maths.

'British Science Week' is facilitated each year, providing children with the opportunity to develop their interest in Science through a series of informative and fun activities around a central theme.

Our five characteristics of learning: independence, collaboration, perseverance, questioning curiosity are woven into lessons.

Continuous professional development is planned across the year in order to ensure staff are able to best support and develop children's historical skills and learning.



- Science forms part of children's home learning across the year, in the form of an open-ended project, highlighting its profile within the curriculum.
- Children aspire to become 'Science Ambassadors' and work across the school.
- The school is in the process of achieving the Primary Science Quality Mark.
- Gallery events are used as an opportunity to showcase children's Science outside of the school, creating strong links with the local community and rooting children's learning and outcomes in the 'real world'.
- Vocabulary lists for all subjects have been created to expose children to more words to expand their vocabulary.
- Vocabulary lists are visible on all working walls.

ASSESSMENT AND FEEDBACK

- Children take responsibility for their learning through regular formal and informal self-assessment alongside continuous adult feedback, both verbal and 'in the moment' as well as more formalised assessment against success criteria that links to the learning objectives.
- Science books showcase children's learning journeys and form a basis for assessment, with opportunities and evidence of both guided and independent projects.
 - Lessons incorporate revisit and retrieval elements, promoting the facilitation of recalling information from long-term memory and, thus, strengthening its future retrieval.
- Teachers plan in support sessions or groups for any gaps found through assessment.

SEQUENCING AND PROGRESSION

Content and skills are planned and taught through termly projects and on a 1-year cycle, ensuring that skills and knowledge is developed.

We focus on the five Science enquiry types to help us find the answer to our investigable questions and promote independence for children to conduct their own experiments.

The progression of science is designed to build upon children's natural curiosity, helping them develop scientific knowledge and skills year by year.

Projects are driven by over-arching learning objectives in which the sequence of lessons and teaching builds towards. Each stage introduces new scientific concepts while reinforcing and extending previous learning.

Subject specific vocabulary is meticulously plotted across the science curriculum to share and use in context with children.

IMPACT

Science is embedded in the culture of the school, with all children able to draw on their learning and experiences of the subject across the curriculum. Children are scientists in their own right and are both proud and informed of their place in the world of science. Science helps shape children's thinking, skills, and understanding of the world whilst encouraging them to become problem-solvers and collaborative and practical learners. Children are able to talk about both their learning, with regards to the science curriculum, and the vocabulary that encompass it. Both staff and children understand how to progress themselves as facilitators and learners, with adults able to pinpoint next steps through appropriate, ongoing assessment, enabling them to facilitate the further development of the children.

IMPLEMENTATION