Chambersbury Science Curriculum

At Chambersbury, we want our children to be naturally curious about the world around them. We recognise the importance of science in every aspect of daily life. A solid understanding of scientific knowledge and conceptual understanding supports pupils across the curriculum and develops critical thinking. Our aim is to deliver the National Curriculum for Science in a broad and balanced way, ensuring progressive development of knowledge, concepts, and skills, while fostering a lifelong love of science. By providing this rich and engaging curriculum, we aim to equip our children with the knowledge, skills, and curiosity to become confident learners, valued members of their community, and responsible contributors to the wider world.

Intent

At Chambersbury, our intent is for every child to leave school with a strong core of scientific knowledge, acquired through a range of practical, enquiry-based, and experiential learning opportunities. Science units cover the main principles of biology, chemistry, and physics, delivered in a progressive sequence using resources from Oak National Academy. Knowledge and skills are built systematically as pupils move through the school to ensure they are confident and able to apply their learning in different contexts.

Alongside knowledge, all Chambersbury scientists develop scientific enquiry skills. By the end of Year 6, our pupils will be able to:

- Ask their own scientific questions.
- Plan and carry out investigations to test their ideas, where appropriate.
- Collect and analyse results systematically.
- Draw conclusions, present evidence clearly, and consider implications for the future.

Implementation

Science is taught weekly across Key Stages 1 and 2, following the Oak National Academy Science modules, which provide comprehensive, curriculum-aligned lessons and resources. Teachers flexibly use these lessons, adapting activities where necessary to meet the needs of their classes, while following clear guidance to ensure consistent coverage of the National Curriculum.

In the Early Years Foundation Stage (EYFS), Science is also supported through Oak National Academy resources. The EYFS curriculum is carefully aligned with Development Matters, the Early Learning Goals, and other relevant EYFS statutory guidance, with a focus on hands-on exploration and practical learning. Children investigate and experience the world around them through play, observation, and

first-hand interaction with natural and everyday materials, building early scientific knowledge, vocabulary, and enquiry skills.

We ensure high-quality, progressive teaching and learning by:

- Explicitly teaching pupils how to make predictions, observe carefully, record results, and draw conclusions.
- Providing regular opportunities for practical investigations, outdoor learning, and thematic experiences such as Science Week and Healthy Living Week.
- Integrating knowledge and enquiry skills across the curriculum to ensure retention and progression.

Scaffolding & SEN Support

We recognise that children have different strengths and needs in science. To ensure all children can access learning objectives, we provide a range of scaffolds and supports, including:

- Tier 3-word banks and vocabulary lists
- Investigation planning frames
- Visual aids and diagrams
- Pre-teaching and post-teaching sessions
- Hands-on, practical activities and experiments
- Adult support for individuals or small groups

These strategies ensure that learning is inclusive and supports all pupils in developing knowledge and skills confidently.

Impact

Our science curriculum results in a high-quality, engaging, and fun science education that equips children with a strong foundation for understanding the natural and physical world. Pupils experience first-hand learning opportunities, both indoors and outdoors, through practical investigations, workshops, trips, and themed weeks. They develop a clear understanding of how science has shaped the world and its importance for future prosperity.

Pupil voice informs curriculum development, allowing us to respond to children's interests, attitudes, and enjoyment, thereby motivating learners and fostering a lifelong curiosity for science.