



Science Curriculum

Intent, Implementation and Impact Statement

Intent

At Chaucer Primary School, our intent for science education is to cultivate a deep and lasting curiosity about the world, encouraging pupils to develop a sense of awe and wonder. We aim to provide a strong foundation in scientific knowledge and skills and enable pupils to use their scientific understanding to explain and make sense of the world around them. Our vision is to deliver science lessons that captivate and ignite curiosity, fostering a genuine love for scientific exploration. Through inquiry-based learning, pupils are encouraged to generate their own investigative ideas and thought-provoking questions. We use a diverse range of resources and materials, enabling pupils to explore hands-on experiences within the classroom. By fostering independent thinking and problem-solving skills, we empower pupils to seek answers and embrace intellectual challenges. Through interdisciplinary connections, collaborative work, and the study of real scientists, we aim to cultivate a comprehensive understanding of science and its real-world applications. We foster an inclusive environment that supports all learners and ensures that every pupil achieves their full potential in science.

Implementation

At Chaucer, we have implemented a comprehensive and well-structured science curriculum that covers the key scientific concepts and skills outlined in the National Curriculum. Our curriculum is carefully sequenced to build on prior knowledge and enable children to make connections between different areas of science.

Our science teaching is interactive, practical, and hands-on, providing children with frequent opportunities to explore, investigate, experiment, and strategies for pupils to ask questions. Pupils regularly have the opportunity to work scientifically based on scientific enquiry and investigate using 'plan', 'do', 'review' to work like a scientist.

We use a range of resources, including high-quality scientific equipment, ICT, and outdoor learning environments to enhance the learning experience. We also utilise local natural resources and invite external experts, such as scientists and professionals, to share their knowledge and experiences with our pupils.

We integrate scientific vocabulary and language development systematically into our science lessons, encouraging pupils to effectively communicate their scientific ideas and

findings. We promote collaborative learning opportunities, enabling pupils to work in teams to investigate and solve scientific problems.

To ensure depth of understanding, we provide regular formative assessments to gauge pupil's progress and identify any misconceptions. We use a range of assessment strategies, such as observations, practical tasks, and discussions, to gather evidence of learning. We strongly believe in the importance of feedback, and provide constructive feedback that helps pupils to reflect on their scientific knowledge and skills to make progress.

Impact

The impact of our science provision is evident in our pupils' knowledge, skills, and attitudes towards science. Our pupils demonstrate a secure and deep understanding of scientific concepts, terminology, and scientific principles. Our pupils understand how to work and think like a scientist. They use their knowledge confidently to explain, predict, and reason about the natural world. They observe and ask scientific questions, plan and conduct investigations, collect and analyse data, draw conclusions, and evaluate their findings critically.

Our pupils are equipped with a range of scientific skills, including practical skills, data handling, and problem-solving, enabling them to apply their scientific knowledge effectively in various contexts. They can communicate their scientific ideas clearly and precisely, both orally and in writing, and collaborate effectively with their peers during scientific activities.

The impact of our science provision extends beyond academic achievement. Our pupils develop a genuine passion for science, actively engaging in scientific activities inside and outside the classroom. They demonstrate high levels of curiosity and enthusiasm, are confident in exploring scientific concepts independently, and show resilience when faced with challenging investigations. We observe an increase in pupils' self-confidence and inquisitiveness, as their scientific knowledge and skills grow. Through a well-structured curriculum, high-quality teaching, and a range of practical experiences, our pupils become confident and capable young scientists, ready to embrace the opportunities and challenges of the future.