

Science

Intent:

At Blackwell Primary School, we encourage children to be inquisitive, the Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group. The key knowledge identified by each year group is informed by the national curriculum in accordance with NC expectations. Key skills are also mapped for each year group and are progressive throughout the school. The curriculum is designed to ensure that children can acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently. The school's approach to science takes account of the school's own context, ensuring access to places of scientific interest as part of the school's commitment to learning outside the classroom. Cross curricular opportunities are also identified, mapped and planned to ensure contextual relevance, mostly through Outdoor School sessions. Children are encouraged to ask questions and be curious about their surroundings and a love of science is nurtured through a whole school ethos and a varied science curriculum.

Implementation:

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Science is taught in topic blocks, based on the areas of Science to cover as stated by the National Curriculum. Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics. Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding. Regular events, such as Science Week allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. At the end of each topic, key knowledge is reviewed by the teacher and consolidated as necessary. The use of our outdoor facilities is also used to facilitate the teaching and learning of Science and its key enquiry skills through Outdoor School sessions.

Impact:

The successful approach to the teaching of science at Blackwell Primary School will result in a fun, engaging, high quality science education, that provides children with the foundations for understanding the world that they can take with them once they complete their primary education.

Assessment at Blackwell Primary School is teacher based and formed using formative strategies (Use of concept maps, verbal/written outcomes, reflection tasks/presentations).

Children at Blackwell Primary School will:

- demonstrate a love of science work and an interest in further study and work in this field
- retain knowledge that is pertinent to Science with a real life context.
- be able to question ideas and reflect on knowledge.

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- be able to articulate their understanding of scientific concepts and be able to reason scientifically using rich language linked to science.
- demonstrate a high level of mathematical skills through their work, organising, recording and interpreting results.
- work collaboratively and practically to investigate and experiment.
- achieve age related expectations in Science at the end of their cohort year.