Science – Intent, Implementation and Impact

Document last updated in September 2025.

Intent

Children should learn, and enjoy learning, about the world around them. They need to know about their body, including how to protect it, keep it healthy and be proud of who they are. They should also learn about how every day occurrences take place, both natural and human influenced, such as the properties of materials, changes of state, forces which affect their movement, as well as how electricity and fuels assist them in life.

Ideally, every Science lesson should include an enquiry of some sort, whether it be a practical experiment or investigating a theory through research. Children need to know how to conduct a fair test, how to record their results and, through evaluations, what their results mean in a wider context. As children get older, they should begin to be exposed to equipment with a low level of risk involved, so that they can learn how to manage these risks and reduce the level of danger involved. They should also begin to devise investigations of their own choice, linking in with prior learning, in order to expand their knowledge, understanding and passion for the subject.

Through visitors (we have formed a good working relationship with Bright Spark Science in recent years) and trips out (Braywick Nature Centre is a standard trip venue for multiple year groups), external staff also share their love of the subject and hopefully inspire the children in the process.

Implementation

The subject is taught in line with the 2014 National Curriculum. For Early Years, the subject is covered within the 'Understanding the World' area of learning. Years 1-6 follow the Scholastic scheme of work, from which planning is adapted to meet each teacher's individual style. Use of websites and videos to present the more abstract or, literally, out of this world concepts is encouraged.

Some topics are revisited and developed, allowing children to expand their understanding and enquire further. This includes, but is not limited to, grouping of material types in Year 1 and exploration of their properties in Year 2; magnetism and the concept of friction in Year 3, types of forces and investigations into friction in Year 5; life cycles of plants and animals in Year 5, and adaptation and inheritance of these species in Year 6.

The subject is taught for between 1 and 2 hours a week in each class. Every class is taught Science a permanent Oldfield teacher, with planning shared between year group colleagues and advised upon by the curriculum leader. Cross-curricular links from Science include, but are not limited to, presenting of data in tables and graphs with Maths; keeping healthy with PSHE; exploring of local environments with Geography.

Oldfield celebrates National Science Week in March of each year. This week consisted of shows and workshops from external companies, as well as fun experiments from teachers on the playground at break times. The theme for 2026 will be ‘Curiosity: What’s your Question?’

Impact

The children’s learning is recorded in Science books, sometimes through diagrams, activity sheets and at other times through written accounts of their enquiries. Work is also evidenced through photographs, while children’s scientific enquiry progress is assessed and recorded on an internal document. This document is shared with the subject lead and passed to the children’s next teacher at the end of each academic year.

Learning walks and book scrutinies will be carried out once each term. Pupil interviews can be incorporated into these.

At the end of Key Stage 2, teachers routinely submit data to the local authority on which children have and have not achieved the expected national standard.

Science received a ‘deep dive’ from Ofsted in April 2025. The review of this deep dive contributed to the school receiving a grading of ‘outstanding’ in all categories.