



SCIENCE



Curriculum Statement

At Drake's and Otterton C of E Primary Schools, we want our children to become resilient, positive, articulate young people who are able to make well informed life choices. We believe that teaching a broad and rich curriculum which has a focus on the Science taught curriculum as well as the enrichment opportunities Science offers, will support our children to reach this goal.

Intent

We are committed to ensuring all children are inspired to develop their Science Capital to become scientists of the future as they build their understanding of the value and place science has in their lives. As one of the core subjects taught in Primary Schools, we give the teaching and learning of Science the prominence it requires. As we encourage the children to become 'scientists', we aim for all children to be fully engaged in their science lessons, to be challenged by them and to make good progress during them. We have high expectations for all learners and encourage exploration, asking questions and making mistakes. We aim, as the children's knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence. They are provided with problem solving opportunities that allow children to find out themselves by asking their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom. In order to provide suitable learning opportunities for all children, teachers ensure that they use QFT and a variety of strategies to accommodate all learners.

In conjunction with the National Curriculum, our Science teaching aims to:

- stimulate and excite pupils' curiosity about natural phenomena and events in the world around them;
- support this curiosity with the teaching of scientific knowledge and conceptual understanding through an investigative and practical approach to the specific disciplines of Biology, Chemistry and Physics;
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them;
- develop pupils' understanding of how major scientific ideas contribute toward technological change that impact locally and globally and become equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future;
- develop the essential scientific enquiry skills to deepen their scientific knowledge through a progressive curriculum;
- use a range of methods to communicate their scientific information and present it in a systematic, scientific manner, including I.C.T., diagrams, graphs and charts;
- develop a respect for the materials and equipment they handle with regard to their own, and other children's safety;
- learn to question, discuss and act on science based issues that may affect their own lives, the directions of society and current global sustainability;
- support children in developing a lifelong love of scientific learning, discovery and a skill set required to do so.

Implementation

Children at both Drake's and Otterton C of E Primary Schools will experience weekly lessons in Science throughout Key Stage 1 and 2. This is planned using a 2 year rolling programme in each curriculum phase to ensure complete curriculum coverage. We build upon the learning and skill development of the previous years. Links to other curriculum areas are made, for example the use of data tables and graphing scientific results for maths as well as using measuring equipment and reading scales. In their Science writing, children are taught science vocabulary for each topic and are then expected to use it in their planning, recording and explaining. *Working Scientifically* skills are embedded into lessons, taught alongside the knowledge objectives to ensure these skills are being developed throughout the children's school career. New vocabulary and challenging concepts are continuously introduced through direct teaching. This is developed through the years, in-keeping with the topics.

Each term there will be a 'science week' whereby children will have opportunities to be involved in national science programs, discuss global topical issues and get involved in many practical science activities and investigations. For example the *Young Imagineers Week* competition which allows children to explore past and present inventors and explore how they could solve some of today's problems

Impact

The successful approach at Drake's and Otterton C of E Primary Schools results in a fun, engaging, high-quality Science education, that provides children with the skills and foundations for understanding the world. By ensuring children are able to investigate and explore, children learn through varied and first hand experiences of the world around them. Our whole-school approach to science aims to increase the children's Science Capital and raise the profile of science as it plays a role in our everyday lives. Pupil voice is used to further develop the Science curriculum, through questioning of pupils' views and attitudes to science to support the children's enjoyment and ownership of Science and to motivate their learning. Teachers will assess children's science work in a variety of ways to ensure they gain a full understanding of what each child has learnt, and what is needed to progress their understanding. Teachers will observe, provide written and oral feedback. Teachers will use the National Curriculum statements to support them to make an overall judgment of children's scientific ability. In addition, teacher assessments are recorded as part of KS1 and KS2 SAT's data, which is reported to parents and the Local Authority.

The Curriculum Leader for Science is: Mrs Claire Pegg

Science in the Early Years

In Early years, Science is taught through 'Understanding the World' objectives. Children are encouraged to ask lots of questions and make observations of the world around them. Children will have many play-based opportunities to investigate the world around them through their rich learning environment, continuous provision and forest school experiences.