Our Science Curriculum



Curriculum Intent

At Wootton Wawen C of E Primary School, our science curriculum aims to give all children an understanding of the world around them whilst acquiring the skills and knowledge to help them to think scientifically, and to gain an understanding of scientific processes and an understanding of the use of Science, today and for the future.

We want every child to have a positive experience of science and to be curious and passionate about science in their everyday life. We ensure all children are taught age appropriate science subject knowledge as laid out by the National Curriculum whilst also developing scientific skills. Our science lessons provide children with opportunities to ask questions, make observations, investigate their ideas, reach conclusions and ultimately improve their understanding. Our science curriculum also aims to develop our children's social skills by working in teams and encouraging perseverance, communication, collaboration, resilience and problem-solving.

Our curriculum aims are those of the National Curriculum 2014 to ensure all children:

- develop scientific knowledge and conceptual understanding through 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;
- are equipped with the scientific knowledge required to understand the uses and implications
 of science, today and for the future.

Curriculum Implementation

Our curriculum is based on the programme of study for Science in the National Curriculum 2014. It has been carefully planned, on a two-year rolling programme, and is designed to engage and excite all of our learners. We developed our medium-term plans using a range of resources, including PLAN (from The Association of Science Education) and Hamilton Trust.

There are opportunities for all children to develop their scientific skills in each unit of work, and progression of skills has been planned so children are increasingly challenged as they move through the school. In addition, TAPS (Teacher Assessment in Primary Science) 'Why and How' resources from Bath Spa University are used to provide a framework of focused activities and assessments for 'Working Scientifically'. Links are made to termly themes and other curriculum subjects where appropriate.

Science is taught by individual class teachers who are responsible for planning, resourcing and delivering the curriculum. During each lesson, children will develop their understanding of key scientific vocabulary through planned talk time.

The science curriculum is enriched in a variety of ways including:

- visits from STEM ambassadors.
- visits to science venues such as Brandon Marsh and the National Space Centre.
- reading books linked to science topics.

<u>Curriculum Impact</u>

By the end of Year 6 we expect our children to know, apply and understand the knowledge, skills and processes identified in the National Curriculum Programmes of Study for Science. They will be equipped to ask questions, plan scientific investigations, select appropriate ways to present data and reach conclusions. They will have a confidence and a love of learning for all things science.

Assessment

In **EYFS**, assessment is an ongoing process throughout the year, with end of year attainment being measured against the Early Learning Goals for the area 'Understanding the World" and reported in the Early Years Foundation Stage Profile. The EYFS Profile is a statutory requirement.

In KS 1 and KS 2 formative assessment is used to guide the progress of individual pupils in science. Teachers keep records of individual children's progress against key learning objectives and these assessments contribute to a summative judgement at the end of each term which is recorded on our online tracking system, Insight. Statutory assessments take place at the end of Year 2 and Year 6. Teachers use guidance from Teacher Assessment Frameworks and Teacher Exemplification Documents for end of Key Stage 1 and 2.

Pupil's progress is reported to parents at consultation evenings held twice a year and through an annual report.

Monitoring

The subject leader monitors the quality of teaching and learning in Science through book scrutinies, pupil conferencing and learning walks and records the key findings on the school's proforma.