Science

Our Intent Statement:

At Great Finborough Primary School, Science is a core subject. We believe that a high quality Science education provides the fundamentals for understanding the world through the disciplines of Biology, Chemistry and Physics.

It is our aim for pupils to develop scientific knowledge and conceptual understanding in order to understand the uses and implications of Science today and in the future. This includes understanding and applying the nature, processes and methods of Science in a variety of contexts. Pupils will explore scientific concepts and develop skills in a progressive manner, as they move on their learning journey through the school, ensuring they are able to access their next stage of learning and develop their own interests within the subject. They will have opportunities to combine scientific knowledge and skills with those of other subjects, particularly, Maths, English, Design and Technology, Art and Computing.

Moreover, we aim to foster a sense of excitement and curiosity towards their understanding of the world about us and their part in it. Our children will use their continually developing working scientifically skills and knowledge to explain what is occurring, use the power of rational explanation, predict how things will behave and analyse causes. Our enrichment opportunities, including trips, visits and Forest school, will not only help children to link Science to the real world, but also help them to associate Science with a sense of awe and wonder.

Our Implementation Statement:

Our Science curriculum includes the programmes of study within the National Curriculum, augmented by additional focus units aimed at developing children's skills of working scientifically, and broadening their understanding of current issues facing the world we live in. Additionally, real world and outside learning opportunities help children consolidate and extend their learning and develop complimentary skills.

We use 'Developing Experts' to help deliver exciting and engaging learning opportunities, aimed at developing curiosity and deeper thinking, including analytical and reflective thinking. This encourages our children to ask questions about the world around them. Scientific careers are included in learning materials, enabling children to encounter Science professionals and learn how scientific understanding contributes to solving global challenges.

Knowledge and skills are built cumulatively, with opportunities to revisit key topics to secure understanding and develop increasing depth and complexity.

At Great Finborough Primary School, our children develop a foundation of scientific understanding through practical, enquiry-based learning. They develop working scientifically skills including: making careful observations, classifying, predicting, testing, measuring and evaluating. During lessons, there is a balance between practical enquiries, knowledge development, open-ended questioning and application to real life contexts. Following investigations, there are opportunities for reflection and discussion, enabling children to explore the significance of their findings. This aspect links well with the school's overall ethos and links to pupils' overall sense of belonging in the wider world.

Our Impact Statement:

By the time our children leave Great Finborough Primary School, they will have furthered their curiosity, and developed their scientific thinking, independence and a life-long interest in scientific enquiry.

Our pupils will have developed the knowledge and skills to be able to:

- Question, reason, and apply their understanding to the world around them.
- Make careful observations and undertake relevant research.
- Plan and conduct different types of scientific enquiries, including controlling variables.
- Take measurements using a variety of equipment, with increasing accuracy and precision.
- Record data and results in a variety of formats, including diagrams, labels, keys, graphs and charts.
- Make predictions to set up further tests.
- Make conclusions, establish relationships and present findings.
- Identify scientific evidence that has been used to support or refute ideas.
- Be able to work collaboratively and productively with others.
- Use a range of equipment purposefully and safely.
- Have the ability to self-evaluate their work, identifying any errors and understanding how to remedy them or further their investigation.
- Have developed essential life skills and knowledge, for example: how to keep themselves and others healthy, to understand how different species survive and the threats they may be exposed to, to be aware of different habitats and environmental issues with may affect them and the species which live there, how we see things, how the world works, for instance, in terms of electricity and forces, and how the earth is part of the solar system.

Additionally, we want our children to find Science fascinating, realising how it has shaped and will continue to shape all our lives, and that they will have the skills and knowledge to take forward to their next stage of learning.