



Science

Statement of Intent

At Ralph Butterfield Primary school, we provide high quality science education that develops scientific knowledge and conceptual understanding through the disciplines of biology, chemistry and physics. Our ambitious and engaging curriculum provides the children with an increasing understanding of the world around them. The progressive application of substantive and disciplinary knowledge, utilising high level scientific vocabulary, highlights the importance of science in our daily lives now and in the future.

The aims of teaching Science in our school are to:

- Build on the children's enthusiasm and curiosity about the world in which they live.
- Inspire the children's curiosity and fascination about the natural and man-made world through the teaching of how to respect and protect the environment.
- Provide a stimulating environment where children can be ambitious and work in an investigative way.
- Develop, through practical work, the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesising, and precise measurement skills.
- Encourage and enable children to offer their own suggestions, and to be creative and ambitious in their approach to science, taking lines of enquiry in ways that interest them.
- Enable children to develop their co-operation and collaboration skills when working with others.
- Encourage children to collect relevant evidence and to question outcomes.
- Encourage children to treat the living and non-living environment with respect.
- Promote the need for personal and group safety with the correct use and storage of resources.
- Encourage children to critically question the world around them.
- Equip children with the language to be able to discuss their learning and confidently explain their scientific understanding.

What this looks like for children at Ralph Butterfield Primary School

At Ralph Butterfield Primary School, science is thoroughly enjoyed by children and staff throughout the school. From Reception, all the way through to Year 6 there is a real sense of enjoyment during science lessons; the children are inquisitive, enthusiastic and passionate about exploring the world around them, discovering new information and making links to previous knowledge.

Science is planned carefully and delivered through a two year cycle, ensuring ample coverage of the three disciplines of science, with a clear progression of substantive knowledge within each phase and throughout school. Likewise, disciplinary knowledge is progressively sequenced, taught, practised and built up on in each phase and throughout school. A wide variety of teaching strategies are used within the delivery of science lessons and scaffolding is implemented to enable all learners to access the curriculum and succeed. There is also an emphasis on the direct teaching of scientific vocabulary to enable all learners to be able to articulate their scientific knowledge effectively.

The teaching of science is interactive and engaging for the children. It isn't just inside the classroom, the children frequently utilise outdoor areas including the playground, garden areas and the field which

enriches their learning experiences. Practical and hands on activities are continuously used to further enhance the children's experience, spark further curiosity and ensure that science is accessible to all.

We are extremely fortunate to have new, high quality, relevant practical science equipment. This provides a wide variety of opportunities for the children to experience and explore all three disciplines of science through teacher demonstrations, accurate life-like models, practical activities and equipment for children to safely conduct investigations. The variety and quantity of equipment available allows whole class investigations to take place where the children are able to select which equipment to use, allowing them to be ambitious with their investigative designs, make decisions, problem solve and either work independently or collaboratively. The amazing science equipment that we have available also enables up to date technology to be easily integrated into science lessons, through the use of data loggers and laptops to record and represent data.

The children at Ralph Butterfield Primary School have frequent opportunities outside of their weekly science lessons to engage with science and be inspired by inspirational scientists through pleasure for reading books, science displays, scientists visiting school and science assemblies. Furthermore, the children participate in and are enthused by different aspects of science through British Science Week activities and whole school homework tasks where they have the opportunity to enter competitions such as the Space and Mars Day logo competition.