



Growing to Serve

'Rooted and grounded in the love of God and in the love of learning'

based on Ephesians 3.14-21

Science

Intent

Why do we teach this? Why do we teach this the way we do?

The overarching intent for Science is to:

- ***For the children to have the scientific skills, knowledge and understanding in biology, physics and chemistry.***
- ***Provide children with practical experiences that foster their scientific curiosity and encourage them to ask questions.***
- ***Research significant, worldwide and diverse scientists and understand their role in society.***

At Woodborough School, we understand that scientific knowledge and skills are an essential part to understanding the world.

*The key scientific enquiry skills are embedded in each topic the children study and these topics are revisited and developed throughout their time at school.

* Our topic approach allows us to enrich learning and study it across many aspects of the curriculum. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

*All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions.

*Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts are reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

Implementation

What do we teach? What does this look like?

Science planning is a process in which all teachers are involved. This ensures full coverage of EYFS and the National curriculum and allows for adaptations and additions to be made to meet the needs of our children. We base our planning on the Christopher Such framework and staff meet for planning days and this is where we discuss what has been covered in the previous year and what needs to be revisited or developed. Science is taught weekly which allows for a much greater depth of learning to take place and curriculum links to be made. During a science topic we aim for a focus for writing which builds vocabulary and gives a purpose for recording. Teachers plan to suit children's interests, current events and teaching/learning styles. There is also an opportunity to plan trips and visits to embed the learning.

We recognise that science understanding needs to be revisited and reinforced throughout the year and so there are links made through morning starters (e.g. Exlorify) or celebration and curriculum weeks e.g. - having an art and science week or learning about famous Scientists in book week. At Woodborough we use our outdoor areas to reinforce science learning too. Through planting and harvesting our raised beds and working / playing in our wildlife garden for example. Children learn the possibilities for careers in science through community links and 'HOWW' talks.

We can track our science learning through-

- *formative assessments – beginning and end of topics
- *quizzes to target certain sticky knowledge
- *notes on coverage and understanding
- *moderation of science work and science in writing throughout the school
- *pupil discussions about learning

Impact

Our Science Curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress.

Children at Woodborough enjoy science and this results in motivated learners with sound scientific understanding. They are encouraged to understand they can be scientists and capable of achieving.