

Science Policy



*'Learning for life,
building a firm foundation'*

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At All Saints, we believe that our vision, *Learning for life, building a firm foundation*, is really important in terms of Science because we believe that children need firm foundations on which to build in all aspects of their lives. Science makes an increasing contribution to all aspects of life. Children are naturally fascinated by everything in the world around them and Science makes a valuable contribution to their understanding.

Curriculum Intent

At All Saints our vision for Science is that we value curiosity and wonderment of the world around us and understand that it is crucial in further developing their knowledge and interests. We provide opportunities for all children to develop and extend their learning by providing a high quality, inspiring and motivating Science Curriculum. We want our children to become confident and creative learners who are not afraid to questions and challenge the concepts they learn.

Curriculum Implementation

At All Saints, our teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. We want all children to believe they are capable of becoming successful scientists with a thirst for learning!

Our whole school approach to the teaching and learning of Science involves the following:

- Science is taught in planned and arranged topic blocks, using the National Curriculum to provide a structure and skills development for the science be taught.
- In EYFS, continuous provision is in place to support the children in meeting their Early Learning Goals; this is covered through the year, based on themes, children's interests and the time of the year.
- The delivery of science aims to be engaging, often involving high-quality resources to aid understanding of conceptual knowledge.
- Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the year groups, within the topics being taught.

- We build upon the knowledge and skill development of the previous years. As the children's knowledge and understanding increases, 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.

Curriculum Impact

This approach to learning at All Saints results in a fun, engaging and high-quality science education, that provides children with the foundations and knowledge for understanding the world and supports their future learning. Our children enjoy being challenged with scientific questions and show determination to find conclusions. They develop a high level of scientific vocabulary.

Teaching and learning

- In Nursery and Reception, the science aspects of the children's work are related to the objectives in the early Learning Goals and forms an integral part of their topic work throughout the year.
- The whole school participates in STEM week and display their learning at the end of the week.
- The use of PlanBee Science scheme is implemented in all year groups as a basis for engaging and stimulating progressive lessons.
- Group children in mixed ability groups.
- Provide resources of different complexity, depending on the ability of the child and the task set.
- Use classroom assistants to support the work of individuals or groups of children.

Resources

We have sufficient, high-quality science resources to aid and support the teaching of all topics taught, from EYFS to Y6. We keep these in a central store, where they are labelled and easily accessible to all staff. EYFS have a range of resources kept in classes, for simple access for children during exploration. Each classroom contains a good supply of science topic books to support children's individual research. All teachers have access to PlanBee planning scheme and resources.

Science and assessment

Children demonstrate their ability in science in a variety of different ways. Teachers will assess children's work in science by making informal judgements as they observe them during lessons. On completion of a piece of work, the teacher assesses the work and gives oral or written feedback, as necessary, to inform future progress. Pupils are also encouraged to make judgements about how they can improve their own work. We use this as the basis for assessing the progress of each child and year group.

The science subject leader looks at examples of pupil's work, discusses learning with pupils, teachers and teaching assistants, and monitors the expected level of achievement in science for each age group in the school.

'Sonar' is used as a tool to track children's scientific progress at All Saints. Formative classroom assessments help to build an overall picture of their developing scientific skills.

Science and equal opportunities

- We aim to give every pupil the opportunity to enjoy a variety of scientific activities.
- Staff will create an environment that challenges stereotype and supports the appreciation of other cultures.
- Diversity and difference are celebrated and respected.
- All pupils will have an equal opportunity to reach their full potential across the science curriculum regardless of their race, gender, cultural background, or special needs.
- We enable pupils to have access to the full range of activities involved in learning new scientific skills. Where children are to participate in activities outside the classroom, e.g., in science workshops we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Science and inclusion

Science teaching considers the needs of different individuals and tasks are designed and differentiated as appropriate to ensure an appropriate level of challenge.

Supporting adults are also deployed effectively to ensure focussed support where this is necessary. Teachers use a range of inclusion strategies, including paired work, open questions and differentiated questioning.

