

'Achieving great things through learning and growing together in a love-filled Christian family'

'That they shall have life, life in all its fullness!'John 10:10

Science Intent, Implementation and Impact

<u>Intent</u>

When teaching Science, here at St Barnabas, we hope to inspire our children by: Giving them the opportunities to pursue their natural curiosity; Promoting the experience of exploring and Investigating scientific phenomena, in a range of contexts, and to ensure a continually evolving knowledge and understanding of the world around them.

Our children are encouraged to ask questions, experiment, reflect and make (and learn from) mistakes in a safe environment. Through this they will acquire and apply core skills which will equip them for life in an increasingly scientific and technological world, today and in the future.

Implementation

The National Curriculum focuses on two dimensions for teaching science:

- Developing scientific knowledge
- Developing scientific skills

At St Barnabas, science is taught as a discrete subject and focuses on developing pupils' competence in both dimensions. Our scientific teaching is concerned with increasing pupils' knowledge and understanding of our world, and with developing skills associated with Science as a process of enquiry.

To ensure imaginative, purposeful and well managed lessons, we use 'Developing Experts' to support the planning of science within our school. Lessons are delivered in a variety of ways ensuring that all children can access and participate in lessons. Interactive, practical activities encourage the children to discuss their ideas and extend their understanding of difficult concepts and challenging questions. Well planned lessons along with access to a vast range of up-to-date scientific equipment, the use of knowledge organisers and subject specific vocabulary displays in classrooms ensures that children receive the best possible science lessons in our school and can apply science to the wider world and staff are confident teaching science.

Science teaching ensures that:

- All pupils are given the opportunity to develop scientific knowledge and acquire scientific skills in a science lesson.
- Topics are blocked to allow children to focus on developing their knowledge and skills, studying each topic in depth.
- A vast range of up-to-date scientific equipment is utilised within science lessons.

- Children are given opportunities to explore, question, predict, research, plan, carry out investigations and observations as well as conclude their findings.
- Children present their findings and learning using science specific language, observations, diagrams, graphs and charts to enable our children to become effective communicators of scientific ideas, facts and data.

Impact

By the time children leave St Barnabas, children will not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives. They will pursue their natural curiosity in a safe environment, developing an understanding of the nature, processes and methods of science through scientific enquiries and can answer scientific questions about the world around them. They are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.