



Science – Impact – What

Children talk confidently about their learning in Science using appropriate and technical vocabulary

Children make links between science and the Christian values of our school

Children develop a range of scientific skills: think independently, raise questions about working scientifically. Carry out scientific investigations, use written and verbal explanations, solve challenging problems, report scientific findings, undertake practical work, find links between scientific technologies, use scientific vocabulary

Science – Implementation – How

Curriculum with clear progression of knowledge and skills needed for each year group and topic, which build upon prior knowledge.

Science and scientific discoveries are valued and links are made with children's personal experiences

High quality teaching that is appropriately pitched to individual children

Make links to everyday life

Outcomes at the end of each unit of study show progress in science

Science – Intent – Why

- Provide the opportunity for all children to have the skills required to be a scientist of the future and to work scientifically
- To allow children to experience the wonders of science and be excited about discoveries.
- To develop future scientists and critical thinkers and curious learners.
- Encourage children to develop a curiosity and interest in science
- Allow children to critically engage with science, providing opportunities to think independently, question, investigate and discover
- Allow children to develop their skills in problem solving
- Enable children to find links between scientific technologies and concepts
- Enable children to understand the history of science and the impact of scientists and their scientific discoveries on our world- build children's science capital regardless of background and starting points.
- Develop a conceptual understanding of scientific concepts, building on prior knowledge and understanding.
- Widen children's knowledge and use of scientific vocabulary
- Enable children to develop scientific knowledge and conceptual understanding
- Equip children with the scientific knowledge required to understand the use and implications of science, today and for the future
- Enable children to develop an understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Our curriculum intentions are best summed up in our drivers: Believe; Equality; Lifelong learning; Ongoing respect; Nurturing; Growing in faith; Independent; Never giving up/perseverance; Gaining new experiences – **B-E-L-O-N-G-I-N-G**

Peer support is utilised well to consolidate individual learning and deepen children's understanding

Work scientifically by: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources

Children have an understanding of the history of scientific discovery and significant scientists, and how they have made an impact on our world

Succinct assessment based which ensures learning is well pitched and matched to individual children's needs

Children will have a rich understanding of science capital

Science skills and knowledge are taught side by side, enhancing each other.

Children will have developed a variety of skills, including questioning, reasoning, holding a debate, communication and resilience.

Children will have developed a passion for science.

Children are able to build upon prior knowledge of concepts and demonstrate a deeper understanding of such concepts.

Children demonstrate and interest or appreciation of science and talk confidently about a range of scientists and scientific discoveries

Use of child led enquiry- children answer their own questions

Support is provided to help structure thinking, e.g. writing frames/templates

Read, spell and pronounce scientific vocabulary accurately – using a word Aware approach

Apply mathematical knowledge to their understanding of science, including collecting, presenting and analysing data

Seek answers to questions through collecting, analysing and presenting data

Teachers have good subject knowledge.

Enrichment opportunities such as visitors to the school who demonstrate scientific concepts through motivating activities

Building science and cultural capital of all individuals through visits to places of scientific interest and discovery where appropriate

Cross curricular approach to learning

Children enjoy science lessons and are confident to demonstrate and discuss their learning with others

Children are prepared for the next stage of their scientific learning

Children confidently apply their scientific knowledge to other areas of learning as well as to the world around them

Children read, spell and pronounce scientific vocabulary accurately