

Science

“Be courageous, be strong. Do everything in love.”



Intent- we aim to...

ignite curiosity, encourage them to confidently explore and discover the world around them

Disciplinary knowledge (being a scientist):

Exploring
Classification
Experimenting and Investigating
Collecting and interpreting data
Making conclusions
curriculum.

Substantive knowledge:
Adapted Cornerstones curriculum.

develop a deeper understanding of the world we live in.

become motivated, lifelong learners

Investigative and practical work

develop a deep and long lasting interest in science

The teaching of key scientific vocabulary is prioritised.



Implementation- How do we achieve our aims?

Our curriculum

- Teachers follow a carefully sequenced curriculum.
- Previous learning is recapped at the beginning of every lesson to ensure content is retained in the long term memory.
- Building cultural capital of all individuals by visits to places of scientific interest and discovery and linking every unit of work to a key scientist (including modern, historic and diverse scientists)
- Read, spell and pronounce scientific vocabulary correctly. Lesson specific vocabulary is explicitly taught/ retrieved every lesson. At the end of a unit, children assess their vocabulary knowledge.
- Memorable experiences are planned in when they clearly support the learning. Each unit ends with an innovate task which is an opportunity to put learning into context and for an audience.
- During STEM week, the children take part in a STEM carousel day where each teacher across the school team up to run different science experiments/ investigations in their classrooms. Throughout the course of the day, the children visit every classroom to take part in a variety of activities.

Feedback and Assessment

proof of progress questions in each lesson to determine progress made.

We assess disciplinary skills using an assessment grid which reflects the progression of scientific skills in each year group.

Scientific vocabulary is RAG rated at the beginning and end of a unit. The children write a definition of key vocabulary at the end of a unit.

Progression of skills

Children need to develop their disciplinary knowledge, their understanding of how to be a scientist and scientific knowledge. In EYFS, children learn these skills very simply as part of their learning in 'Understanding the world' and 'Mathematics', such as observing the natural world, making observations and finding similarities and differences about the natural world. From Year 1 to Year 6, the children focus on using more of their skills through the Golden Threads.

Golden threads

Exploring, Classification, Experimentation and Investigation, Data,
Making conclusions



Impact- how will we know we have achieved our aims?

- Children talk confidently about their learning in science using appropriate and scientific vocabulary.
- Children demonstrate a love or appreciation of science and talk confidently about a range of scientists and scientific discoveries.
- Children enjoy science lessons and are confident to demonstrate and discuss their learning with other
- 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
- Children have an understanding of the history of scientific discovery and significant scientists, and how they have made an impact on our world Outcomes at the end of each Key Stage are in line or above National statistics and progress in science is evident
- 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
- Children make links between science and the Christian vision and values of our school.