



Science Policy

Reviewed Autumn Term 2023

Next review date: Autumn Term 2024

Intent

Pilgrims' Way Primary school is an inclusive and diverse primary school in the centre of Canterbury, which teaches pupils from the ages of 3-11.

The curriculum is designed to make learning relevant and meaningful by embedding context and activating pupil's prior knowledge. Pupils are given opportunities to demonstrate their learning through cultural and personal links. Mainstream Core Standards are used to support all children's access to the curriculum with learning scaffolded to support learners' diverse needs. Teaching opportunities across the curriculum are designed to develop language and literacy so that pupils become fluent in the academic language of the primary curriculum.

We actively liaise with parents to help them support their children's learning.

Science is a body of knowledge built up through experimental testing of ideas. Science is also methodology, a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills.

We believe that a broad, balanced and irresistible science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability. Our aims in teaching science include the following.

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.

Attitudes

- Encouraging the development of positive attitudes to science.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building our children's self-confidence to enable them to work independently.
- Developing our children's social skills to work cooperatively with others.
- Providing our children with an enjoyable experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further.

Skills

- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.

- Developing the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of ICT in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

Implementation

Planning for science is a process in which all teachers are involved in to ensure that the school gives full coverage. Science teaching in the school is about inspiring through an irresistible curriculum. We adapt and extend the curriculum to match the unique circumstances of our school. We have adopted the Kent Scheme of work for the school and lessons are taken and adapted to suit individual classes and teaching preference.

- Generally, one unit may be taught in each half term.
- Some units may have been moved between years, or amalgamated, where appropriate.
- Units on Life and Living Processes are commonly taught in the spring and summer terms.
- Some units may be taught in collaboration with outside agencies, including CCCU.
- Making links between science and other subjects. Using Science to encourage cross-curricular writing especially.
- Hands-on and practical Science is used in most Science lessons to encourage investigative skills and develop questioning from pupils.
- Making life-long scientists is key at Pilgrims' Way and pupils and teachers are encouraged to take their science thinking bigger, extending their knowledge into possible careers using particular science skills.

Assessment

We use assessment to inform and develop our teaching.

- We mark each piece of work positively, making it clear verbally, or on paper, where the work is good, and how it could be further improved.
- We use assessment grids to determine whether a child is working 'At', 'Below' or 'Above' the national average for their age. Written work, practical work and conversations with the child are all taken into context when assessing the child. Teacher Assessments will take place after each Science Topic is completed.
- The 'bottom 20%' are monitored throughout the year by the STEM team. Ensuring pupil voice is heard and key ideas and misconceptions are addressed to allow the child to progress with their peers. Additional work is put in place for certain pupils (SALT for example) that will aid in their development across the curriculum when needed.
- Reports to parents are made at the end of the year, noting each child's effort in science and his/her progress.

Impact

Pilgrims' Way have keen Scientists throughout the school who have an understanding of the world around them. They are inquisitive learners who thrive in practical lessons within the classroom and beyond.

Review

This science policy will be reviewed by the science curriculum leader supported by Stem Hub.