

# Pilgrims' Way Primary School Science Policy

Created: Autumn Term 2018

Next review date: Summer Term 2021

Reviewed: Autumn Term 2019 Reviewed: Spring Term 2020 Reviewed: Autumn Term 2020

## Our rationale for teaching science

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.

#### How science is structured through the school

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.

- KS1 and Foundation stage teachers should be teaching science for a minimum of one hour each week.
- KS2 teachers should be teaching science for a minimum of two hours per week.
- 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 and recording in science

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.
- Reports to parents are made twice a year, noting each child's effort in science and his/her progress.

#### Review

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