

Science Policy



This Policy was reviewed on October 2023

Signed Chair of Governors

J Anderson

Signed Head Teacher

M Battersby

Next Review Date

September 2024

'Loving God and each other, We work together to be the best we can be'

Vision Statement

- Develop children's ideas and ways of working collaboratively that enable them to make sense of the world through working scientifically.
- Develop awe and wonder of God's world.
- Develop children's vocabulary, including science specific vocabulary.
- Provide quality first-hand experiences for all children.

1. 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 and balanced 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.

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, exploring, grouping, classifying, questioning, research, modelling, collaborating, planning, testing, measuring, using equipment, communicating, describing/looking for patterns, explaining results and drawing conclusions.
- Developing the use of scientific vocabulary, recording and techniques.
- Developing the use of IT in investigating and recording e.g. data loggers, microscopes.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

2. Our teaching aims

- Teaching Science (*National Curriculum Programmes of Study*) in ways that are imaginative, purposeful, well managed and enjoyable.
- Giving clear and accurate teacher explanations and developing skilful questioning techniques
- Making links between Science and other subjects.
- Providing challenges in the classroom to develop scientific thinking and vocabulary

Our role is to teach scientific enquiry through the contexts of the Kent Scheme which fulfills the aims and purposes of the National Curriculum programmes of study.

Children in the Foundation Stage - our early learners - are taught the science elements of the Foundation Stage document through the Early-Learning Curriculum: Knowledge and Understanding of the World.

3. How science is structured through the school

Planning for Science is a process in which all teachers are involved to ensure that the school gives full coverage of the *National Curriculum Science and Science in the Foundation stage*. Science teaching in the school is about excellence and enjoyment.

The National Curriculum for Science has been divided into units of work that ensure coverage and progression. Teachers are expected to plan using the Kent Scheme which fulfils the aims and purposes of the National Curriculum programmes of study. It is expected that the children are to be taught to work scientifically through use of resources whenever possible.

4. Equal opportunities in Science

Science is taught within the guidelines of the school's equal-opportunities policy. We ensure that all our children have the opportunity to gain science knowledge and understanding regardless of gender, race, class and physical or intellectual ability. Our expectations do not limit pupil achievement and assessment does not involve cultural, social, and linguistic or gender bias.

We aim to teach Science in a broad global and historical context, using the widest possible perspective and including the contributions of people of many different backgrounds.

We draw examples from other cultures, recognising that simple technology may be superior to complex solutions.

We value science as a vehicle for the development of language skills, and we encourage our children to talk constructively about their science experiences.

In our teaching, science is closely linked with literacy and mathematics.

We recognise the particular importance of quality first-hand experiences for motivating all children including those with learning difficulties.

We recognise that science may strongly engage our gifted and talented children, and we aim to challenge and extend them.

We exploit science's special contribution to children's developing creativity; we develop this by asking and encouraging challenging questions and encouraging original thinking.

5. Assessment in Science

Teachers will assess science throughout the year. Lessons will be planned according to the national curriculum incorporating both knowledge and working scientifically learning objectives into teaching. Assessments will then be input into the school's online Target Tracker on a regular basis which will inform both future planning and progress.

Date:

This policy will be reviewed annually or in the light of new legislation. Staff and governors will be consulted and informed of any changes.