

Science Policy

Reviewed September 2023

Next review September 2024

Our Mission Statement

'Believe, Belong, Be the Best that you can Be'

"Whatever you do in word or deed, do everything in the name of the Lord." Colossians 3:17

<u>Vision</u>

Science is an important area of the curriculum at St. Pauls C.E. and is taught weekly in line with the National curriculum. Areas of study have been selected by the subject leader, ensuring coverage and progression across the key stages. Through science we aim to develop curiosity, enjoyment, skills and a growing understanding of scientific knowledge in all of our pupils by allowing them to raise questions and investigate the world in which they live. As a result children gain a solid scientific knowledge and understanding as well as developing the skills necessary for testing and investigating.

Rationale

Science is the systematic investigation of the physical, chemical and biological aspects of the world which relies on first hand experiences and on other sources of information. The scientific process and pupils' problem-solving activities will be used to deepen their understanding of the concepts involved. The main aspects of science to be studied will be determined by the programmes of study of the National Curriculum 2014.

Through science, pupils at St. Paul's will continue to deepen their respect, care and appreciation for the natural world and all its phenomena.

<u>Aims</u>

To develop pupils' enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life.

To build on pupils' curiosity and sense of awe of the natural world.

To use a planned range of investigations and practical activities to give pupils a greater understanding of the concepts and knowledge of science.

To introduce pupils to the language and vocabulary of science.

To develop pupils' basic practical skills and their ability to make accurate and appropriate measurements.

To develop pupils' use of computing in their science studies.

To extend the learning environment for our pupils via our environmental areas and the locality.

To promote a 'healthy lifestyle' in our pupils.

Attitudes

- Encouraging the development of positive attitudes to science.
- Euild 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 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.

<u>Skills</u>

During their time in Key Stage 1 and 2 children will be taught the skills of investigation specified in the National Curriculum under the heading Working Scientifically. These skills begin with the following for Key Stage 1 and become increasingly more challenging and detailed in Lower Key Stage 2 and Upper Key Stage 2.

Basic investigational skills for Key Stage 1 include:

- To ask questions and recognise that they can be answered in different ways.
- To observe closely and use simple equipment.
- To perform simple tests.
- To identify and classify.
- To use their observations and ideas to suggest answers to questions.
- To gather and record data to help in answering questions.

Details for Lower and Upper Key Stage 2 can be found in the new National Curriculum on pages 155 and 166.

Equal Opportunities

All children have equal access to the science curriculum and its associated practical activities. The class teachers and T.A.'s at St. Paul's are responsible for ensuring that all children, irrespective of gender, learning ability, physical disability, ethnicity and social circumstances, have access to the whole curriculum and make the greatest possible progress. Where appropriate, work will be adapted to meet pupils' needs and, if appropriate, extra support given. More able pupils will be given suitably challenging activities.

Health and Safety

Pupils will be taught to use scientific equipment safely when using it during practical activities. Class Teachers and Teaching Assistants will check equipment regularly and report any damage, taking defective equipment out of action. A simple risk assessment will be carried out for work in environmental areas such as the pond.

Assessment for Learning, recording and reporting

Throughout the school, teachers will assess whether children are working at/above or below the expected level for their age based on their understanding and application of the content of the National Curriculum 2014. Progress and attainment is reported to parents through parents' evenings and end of year reports.

Marking for Improvement

Much of the work done in science lessons is of a practical or oral nature and , as such recording will take many varied forms thus making marking different. It is, however, important that written work is marked regularly and clearly, as an aid to progression and to celebrate achievement. When appropriate, pupils may be asked to self– assess or peer assess their own or other's work

Marking for improvement comments in a child's book must be relevant to the learning objective to help children to better focus on future targets.

Resources

The subject is quite well resourced. Resources are stored in a central cupboard on the main corridor. Each member of staff has a comprehensive resource list and all the drawers are

numbered so that the children can be sent to collect relevant resources. There is also a topic folder which teachers can reference for ideas for creative approaches to their chosen topic and to help with planning investigations.

Role of the subject leader

To keep up to date with changes to the teaching of science. To attend courses and disseminate information to staff on how to teach science successfully.

To support colleagues with ideas and information relating to the topics being taught. To review and update resources as required.

To deliver changes to the staff through staff meetings.

Complete book scrutiny and lesson observations.

This policy will be reviewed according to the emerging needs of our school.

Signed	 Date	 (Chair of Governors)
Signed	 Date	 (Headteacher)