



Mundy C of E Junior School Science Policy 2022

‘Let love and kindness be the motivation
behind all that you do.’ (1 Corinthians 16:14)

Mundy C of E Junior School

SCIENCE POLICY

January 2022

– Our Vision –

Through a positive caring environment, we provide the opportunity for every child to reach their full potential. We embrace Christian values and ensure all children are ready for their next steps. Through science, pupils at Mundy C of E Junior School will continue to deepen their respect, care and appreciation for the natural world and all its phenomena.

Aims:

At Mundy C of E Junior School we understand the need for all pupils to develop their scientific ability. We believe that science is a body of knowledge built up through experimental testing of ideas. Science is also 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 today and in the future.
- To develop our children's enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Helping develop and extend our children's scientific concept of their world and to relate their scientific studies to applications and effects within the real world
- Helping our children acquire a growing understanding of the nature, processes and methods of scientific ideas.
- Encouraging open-mindedness, self-assessment, perseverance and 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 computing in investigating and recording.
- Making links between science and other subjects.

Statutory Requirements:

Statutory requirements for the teaching and learning of science are laid out in, The National Curriculum in England Framework Document for Teaching, September 2014.

How Science is Structured Through the School:

The main aspects of science to be studied will be determined by the programmes of study of the National Curriculum 2014. Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of The National Curriculum programmes of study for science 2014.

Science teaching at Mundy C of E Junior School involves adapting and extending the curriculum to match all pupils' needs. Where possible, science will be linked to class topics. Science will also be taught as discrete units and lessons where needed, to ensure coverage.

By careful planning, pupils' scientific skills and knowledge gained at Key Stage 1 will be consolidated and further developed through supportive investigations into more independent work at Key Stage 2, in Mundy C of E Junior School. The knowledge and content prescribed in the National Curriculum will be introduced throughout the key stage in a progressive and coherent way. Due to the mixed year groups in our classes, science units are taught on a two year rolling programme. This ensures progression between year groups and guarantees topics are covered.

The main focus of science teaching in Lower Key Stage 2 is to enable pupils to broaden their scientific view of the world around them, through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments. The main focus of science teaching in Upper Key Stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas, through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically.

Cross-curricular Science Opportunities:

Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired through science lessons to other areas of the curriculum. For example, using knowledge about condensation and evaporation in geography lessons about the weather, or using data handling (graphs and tables) to link both science and maths lessons.

The Use of Computing:

We recognise the important role computing skills have to play in the development of scientific skills. We also recognise the importance of being computer literate. Computing skills are used to enhance teaching and learning of science and to give all children the opportunity to use computing to research, collect, analyse and present scientific findings.

Inclusion:

We aim to provide for all children so that they achieve as highly as they can in science according to their individual ability. The study of science will be planned to give pupils a suitable range of differentiated activities appropriate to their age and abilities. Tasks will be set which challenge all pupils, including the more able. For pupils with SEN the task will be adjusted or pupils may be given extra support. The grouping of pupils for practical activities will take account of their strengths and weaknesses and ensure that all take an active part in the task and gain in confidence.

Equal Opportunities:

Mundy C of E Junior School has universal ambitions for every child, whatever their background or circumstances. Children learn and thrive when they are healthy, safe and engaged. In order to engage all children: cultural diversity, home languages, gender and religious beliefs are all celebrated. Our curriculum includes a varied range of texts and other resources which represent the diversity and backgrounds of all our children.

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 all practical activities and any perceived hazards will be reported to the Head Teacher who will determine the appropriateness of the activity.

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. Assessment will be informed by teachers' discussions with pupils, observations of pupils and marking work. Assessments will be used to inform staff, pupils, parents and for report writing. Progress and attainment is reported to parents through parents' evenings and end of year reports.

Parental Involvement:

Mundy C of E Junior School aims to involve parents directly in the life of the school, and thus in the development of children's skills, knowledge and understanding in science. There are opportunities each term when parents can discuss their children's progress with their teacher. Mundy C of E Junior School uses 'Home Learning' as a forum for parents to become more involved with their child's learning, providing an opportunity for parents to support their children's science development at home. The Mundy C of E Junior School website provides information about the current science curriculum and any science events that are taking place at school.

Role of Subject Leader:

The Science Subject Leader has a responsibility towards improving the standards of teaching and learning in science through:

- Monitoring and evaluating pupil progress;
- Provision of science;
- The quality of the learning environment;
- Taking the lead in policy development;
- Auditing and supporting colleagues in their CPD;
- Purchasing and organising resources;
- Keeping up to dates with changes in the subject.

The Governing Body:

Reports are made to the governors on the progress of science provision and assessment data.

Conclusion:

This policy should be read in conjunction with other school policies.

This policy will be reviewed every three years or in the light of changes to legal requirements.