

Elworth C of E Primary School



Science Policy

Date:	September 2025
Review Cycle:	2 Yearly
Reviewed By:	Mrs Cunniffe
Approved By:	Mrs Sarah Buckley
Next review date:	September 2027
Nominated Governor:	Mr Barrie Pitt

Mission Statement

'Love God, Love Learning, Love One Another.' Matt 22:36-39

At Elworth we embrace The Church of England's vision for education which is 'Deeply Christian, Serving the Common Good.' When Jesus was asked which was the greatest commandment, he responded with *'Love the Lord your God with all your heart, all your soul and all your mind' and 'Love your neighbour as yourself'* (Matt 22:36-39). These timeless words are at the heart of our vision, nurturing our community and shaping the ethos of our flourishing school.

School's theologically rooted Christian mission

At Elworth we create a stimulating and caring environment, grounded in Christian belief and practice, so that all members of our school community can flourish. We therefore aim to provide an education that provides pupils with opportunities to explore and develop their own values and beliefs, spiritual awareness, high standards of personal behaviour, a positive caring attitude towards other people, an understanding of their social and cultural traditions and an appreciation of diversity within modern Britain. We maintain that learning should be a rewarding experience for everyone; it should be enjoyable. Through our teaching we equip children with the skills, knowledge and understanding necessary to be able to make informed choices about the important things in their lives. Our six Christian values underpin all that we teach : Courage, Community, Perseverance, Generosity, Compassion, Friendship. Our school rules are: To be Ready, To be Responsible and To be Respectful. These are embedded in each child's mind so that they are fully prepared for living each day successfully. We aspire that all our children are a blessing beyond the school walls, beyond their families, beyond their local community, as global citizens. To achieve this the children and adults at Elworth embark on an exciting and adventurous journey together joining in with God's redemptive work in our lives and throughout the world and learn to be advocates for change.

Intent

At Elworth, our intent is to deliver a science curriculum that teaches an understanding of natural phenomena. High-quality STEM education provides the foundations for understanding the world through the specific disciplines of science (biology, chemistry and physics), technology, engineering and maths. Our aims are to stimulate a child's curiosity in finding out why things happen in the way they do. Our curriculum teaches essential aspects of the knowledge, methods, processes and uses of STEM subjects. Through building up a body of key foundational knowledge and concepts, children are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. Children will learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, moral, national, and global level.

Aims

The aims of teaching science at Elworth C.E Primary are to:

- stimulate and excite children's curiosity and interest in science
- enable children to develop skills in working scientifically
- build upon children's natural sense of curiosity about the world around them
- provide opportunities for children to acquire the necessary skills to communicate scientific ideas, facts and data effectively
- enable children to plan and carry out scientific investigations including making predictions and hypothesis, designing a fair test and controlled experiments, collecting appropriate data and drawing meaningful conclusions

- create, where possible, opportunities for science learning to be achieved through investigative and practical activities.
- begin to build up a body of scientific knowledge and understanding which will serve as a foundation for future enquiry.
- enable children to acquire knowledge and skills to be able to make informed decisions in scientific contexts
- appreciate the benefits and limitations of science and its application in technological developments
- understand the international nature of science and the interdependence of science, technology and society, including the benefits, limitations and implications imposed by social, economic, political, environmental, cultural and ethical factors

Implementation

The Governors will:

Elworth CE Primary has a designated link governor who:

- Meets with the Science Leader at least once a term to find out about;
 - the school's systems for planning work, supporting staff and monitoring progress;
 - the allocation, use and adequacy of resources; and
 - how the standards of achievement are changing over time
- Attends training and other events relating to the Science curriculum;
- Reports jointly with the Subject Leader to the governing body with recommendations, if appropriate, once a year.
- is understanding and supportive of our aims in the learning and teaching of Science and to review this policy annually.

The Head teacher will:

- Provide support by encouraging staff and praising good practice.
- Monitor planning and reviews.
- Support staff development through in-service training and provision of resources.

The Science Leader will:

- Work alongside the Computing and Maths leaders to provide a strategic lead and direction for STEM in the school
- Provide support and advice to staff in the delivery of the Science programme of study;
- Remain informed about current developments in the subject by attending INSET sessions and being involved in independent research and reading;
- Disseminate relevant information to staff;
- Deliver INSET sessions to staff, to support staff development;
- Monitor and evaluate teaching and learning of Science;
- Monitor standards in the subject, through planning and work scrutiny, quality of teaching and pupil assessments;
- Order and maintain resources to enhance effectiveness of Science teaching within the school;
- Consider with staff and work with SMT members in the evaluation and planning of actions included within the School Development Plan.

The Class teacher will:

- Be responsible for the teaching of science as set out in the policy.
- Provide planning and reviews for the Head Teacher and science leader to have access to.
- Provide samples of science work to the science leader when required.
- Assess children's work in order to detail future planning.

Teaching and learning style

We use a variety of teaching and learning styles in our science lessons. Our principal aim is to develop children's knowledge, skills, and understanding, as well as a sense of enjoyment in science.

Sometimes we do this through whole-class and small group teaching, while at other times we engage the children in an enquiry-based research activity. Working scientifically along the five lines of enquiry is embedded into the teaching of all units. We encourage the children to ask, as well as answer, scientific questions.

All lessons have clear learning objectives, to be shared and reviewed with the children. Lessons make effective links with other curriculum areas, such as English, Maths and technology where appropriate.

Science is a core subject in the National Curriculum, and we use the new Science Programmes of Study: Key stages 1 and 2 (dated September 2013) as the basis for our school curriculum, ensuring we teach the relevant statutory content.

Where possible, science will be cross-curricular and linked to class topics. Science will also be taught as discrete units and lessons where needed to ensure coverage. In KS1 and lower KS2 lessons are planned in discrete year group topics and objectives. In upper KS2, lessons are planned for topics which work on a 2 year cycle to ensure coverage and progression of the science curriculum. This is due to having mixed age group classes in Years 5 and 6 last year.

Teachers complete a medium term plan for each unit of work so that they can plan for clear progression. There is a specific planning format that staff use.

We have planned the topics in science so that they build upon prior learning. We ensure that there are opportunities for children of all abilities to develop their skills and knowledge in each unit and we also build progression into the science scheme of work, so that the children are increasingly challenged as they move up through the school.

Resources

We have sufficient resources for all science units in the school. We keep these in the Science cupboard in the KS2 corridor. Class teachers may also have a selection of resources relevant to their science teaching. Further reference books and equipment, etc. are available to loan from the Central Resources Library in Winsford or from Sandbach Girls school. All children have access to a laptop/Chromebook to support children's individual research. Staff inform the science subject leader of any requirements for new apparatus.

SEN/GDS

At our school we teach science to all children, whatever their ability and individual needs. Science forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our science teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of disadvantaged and vulnerable children, including those pupils who generate Pupil Premium, those with special educational needs, those with disabilities, and those learning English as an additional language. We take all reasonable steps to achieve this.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors such as classroom organisation, teaching materials, teaching style, and differentiation so that we can take some additional or different action to enable the child to learn more effectively. Ongoing assessment for learning, and summative assessment allows us to consider each child's attainment and progress against expectations. This ensures that our teaching is matched to the child's needs.

Impact

Assessment and recording

We assess children's work in science by making informal judgements as we observe them during lessons. On completion of a piece of work, the teacher marks the work and comments as necessary in accordance with the schools marking policy. Where applicable, the teacher gives advice or a challenge on the next steps for learning. Formal observations and completion of work is used in order to assess children. Where appropriate, a more creative approach can be used for assessing knowledge and understanding. For example – children create a project or report about what they have learnt. This gives the children an opportunity to make decisions as to how they show what they have learnt. At the end of a unit, the teacher makes a judgement on the child in terms of knowledge and working scientifically. We use these judgments as the basis for assessing the progress of each child and we pass this information on to the next teacher at the end of the year.

We report progress in science to parents at the end of the year.

Field Trips

Allowing children to investigate the world around them is a crucial aspect of primary science. This should involve the school grounds, local area and places further afield, depending on the aspect of science being taught. Full use should be made of all available resources for investigation.

Equal Opportunities

All children have equal access to the science curriculum and its associated practical activities. The SLT, Class Teachers and TAs at Elworth CE Primary School 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. Gender and cultural differences will be reflected positively in the teaching materials used.

All children have equal access to the Science Curriculum, its teaching and learning, throughout any one year.

Health and Safety

Children 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 any perceived hazards will be reported to the Head who will determine the appropriateness of said activity. Teachers are aware of their responsibilities and this is in accordance with the school's health and safety policy.

Monitoring and review

It is the responsibility of the science subject leader to monitor the standards of children's work and the quality of teaching in science. The science subject leader is also responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The science subject leader gives the senior management team an annual summary report in which she evaluates strengths and weaknesses in the subject and indicates areas for further improvement. The science subject leader has specially-allocated time for fulfilling the vital task of reviewing samples of children's work, looking at planning and carrying pupil interviews.

