



Slyne with Hest C of E Primary School

Science Policy

Listen, learn, love and laugh as part of God's family.

Policy:	Science
Subject Leader:	Samantha Gregory
This statement was reviewed by the subject leader on :	September 2025
This statement will be reviewed:	September 2026
Governor committee responsibility:	

Purpose and Aims

At Slyne-with-Hest St Luke's CE Primary School, science plays a vital role in helping pupils to understand and value the world around them as part of God's creation. Through science, children are encouraged to develop curiosity, ask meaningful questions, and explore natural phenomena with a sense of awe, wonder and respect.

The purpose of science education at St Luke's is to equip all pupils with the knowledge, skills and attitudes they need to understand scientific ideas, think critically and engage confidently with the world in which they live. We believe that high-quality science teaching supports pupils in growing in wisdom, enabling them to make informed choices and to appreciate the impact of science on everyday life and the wider community.

In line with our Christian ethos, our science curriculum promotes responsibility, ethical thinking and respect for creation. We are committed to ensuring that science is inclusive and accessible to all pupils, enabling every child to flourish, see themselves as a scientist and be well prepared for the next stage of their education and for life beyond school.

Aims

At Slyne-with-Hest St Luke's CE Primary School, we aim to ensure that all pupils:

- **Develop secure scientific knowledge and understanding** of key concepts across biology, chemistry, and physics, appropriate to their age and stage.

- **Build strong working scientifically skills**, including observing, questioning, predicting, testing, recording, and drawing conclusions based on evidence.
- **Develop curiosity, enthusiasm, and a sense of wonder** about the natural world, fostering a positive and lasting attitude towards science.
- **Use scientific language accurately and confidently** to explain ideas, describe processes, and communicate findings.
- **Think critically and independently**, developing the ability to reason, solve problems, and evaluate evidence.
- **Understand the relevance of science in everyday life**, including its role in technology, health, sustainability, and future careers.
- **Respect and care for God's creation**, recognising their moral responsibility to use scientific knowledge ethically and for the common good.
- **See themselves as capable scientists**, regardless of background or ability, supported through inclusive and ambitious teaching.

Planning and Organisation of Teaching

The planning and organisation of science teaching at Slyne-with-Hest St Luke's CE Primary School ensures progression, coherence and high-quality learning experiences for all pupils.

Teachers use a range of planning approaches and resources to support the effective delivery of the science curriculum. PLAN Science is used as the main planning tool, providing high-quality, enquiry based units that support the development of both substantive scientific knowledge and the skills of working scientifically. Teachers adapt planning as needed to meet the needs of their classes while ensuring full coverage of the National Curriculum for Science.

Science units are carefully sequenced within and across year groups so that new learning builds upon prior knowledge and understanding. Key concepts are revisited and developed across key stages, and often year on year, enabling pupils to deepen their understanding, make meaningful connections and retain learning over time. This spiral approach supports long-term memory and progression in both knowledge and skills.

Teachers plan lessons that provide regular opportunities for:

- Practical enquiry and investigation
- Discussion and purposeful questioning

- Accurate use of scientific vocabulary
- Application of prior learning

This consistent and structured approach to planning ensures that science learning is progressive, engaging and inclusive, enabling all pupils to develop confidence and competence as scientists.

Assessment

Assessment in science at Slyne-with-Hest St Luke's CE Primary School is used to inform teaching, support pupil progress and ensure that learning is secure and progressive.

Teachers draw on their professional knowledge of pupils to make ongoing formative assessments throughout lessons. This includes careful observation, questioning, and listening to pupils explain their thinking during discussions, practical work, and investigations.

Evidence of learning is gathered in a range of ways, including:

- **Pupils' science books**, which show progression in knowledge, use of scientific vocabulary and application of working scientifically skills
- **Conversations with pupils**, enabling teachers to assess understanding, reasoning, and misconceptions
- **Practical outcomes and investigations**, where pupils demonstrate enquiry skills and application of knowledge

Teachers use TAPS (Teacher Assessment in Primary Science) lessons where appropriate to support assessment of pupils' understanding and working scientifically skills through structured activities and discussions.

Where appropriate, teachers carry out an end of unit assessment to determine whether pupils have met the intended learning outcomes. This information is used to identify next steps, inform future planning and support progression within and across year groups.

Assessment in science supports inclusive practice by ensuring that all pupils are appropriately challenged and supported, enabling every child to make progress and develop confidence as a scientist.

Role of the Subject Leader

The Science Subject Leader at Slyne-with-Hest St Luke's CE Primary School is responsible for providing clear leadership and direction for science across the school, ensuring high standards of teaching and learning.

The Subject Leader will:

- **Support and advise teachers** in the planning and delivery of high-quality science lessons, offering guidance on subject knowledge, pedagogy and curriculum progression.
- **Listen to the views and experiences of pupils**, gathering pupil voice to evaluate engagement, enjoyment and understanding in science.
- **Monitor the quality of science teaching and learning**, including reviewing pupils' work, observing lessons where appropriate and supporting consistency and progression across year groups.
- **Ensure that their own subject knowledge is up to date**, and that relevant **continuing professional development (CPD)** opportunities are identified and shared with staff to support confidence and expertise in science teaching.
- **Organise and promote enrichment opportunities**, including educational visits, visitors and practical experiences, to enhance pupils' learning and engagement in science.
- **Support inclusive practice**, ensuring that science is accessible and ambitious for all pupils and reflects the school's Christian values.
- **Evaluate the impact of the science curriculum** and contribute to school self-evaluation and development planning.

Through effective leadership, the Science Subject Leader ensures that science is well-resourced, well taught and valued across the school.

Meeting the needs of all Pupils (AGT and SEN)

At Slyne-with-Hest St Luke's CE Primary School, we are committed to ensuring that all pupils are able to access, enjoy and succeed in science.

High-quality teaching is at the heart of our approach and is the primary means by which the needs of all learners are met. Teachers use their knowledge of the children in their class to plan lessons that build on prior learning, address misconceptions, and provide appropriate challenge and support.

Where appropriate, additional adults support learning in science lessons. They work under the direction of the class teacher to:

- Support pupils in understanding scientific concepts
- Encourage participation in practical activities and investigations

- Reinforce scientific vocabulary and enquiry skills

Teaching approaches are adapted to meet a range of needs, including:

- Scaffolding tasks and investigations
- Providing clear explanations and modelling
- Using practical, hands-on experiences to support understanding

This inclusive approach ensures that all pupils, including those with additional needs, are supported to make progress and to develop confidence as scientists. In line with our Christian ethos, every child is valued and encouraged to flourish.

Spirituality

At Slyne-with-Hest St Luke's CE Primary School, science provides rich opportunities to support pupils' spiritual development through experiences of awe, wonder and reflection on the natural world.

Through science learning, pupils are encouraged to:

- Develop a sense of curiosity and fascination about the world around them
- Experience awe and wonder when exploring natural phenomena and scientific discoveries
- Ask big questions about life, the universe and humanity's place within it

Science also supports pupils in reflecting on their responsibility towards God's creation. Pupils are encouraged to consider how scientific knowledge can be used ethically and responsibly, particularly in relation to the environment, sustainability and the impact of human actions on the natural world.

By providing time for discussion, reflection and thoughtful questioning, science at Slyne-with-Hest supports pupils' spiritual growth, helping them to appreciate the beauty, complexity, and value of the world in which they live.

Equality and Diversity

At Slyne-with-Hest St Luke's CE Primary School, we are committed to promoting equality and celebrating diversity through our science curriculum. We believe that science is for everyone and all pupils are entitled to a high-quality science education that enables them to flourish.

Teaching in science is inclusive and ambitious for all pupils. Teachers have high expectations and ensure that lessons are accessible, engaging and appropriately

challenging, taking into account pupils' individual needs, backgrounds and experiences. All children are supported to participate fully in scientific learning and to develop confidence in their abilities.

Through our science curriculum, pupils are given opportunities to:

- See a range of scientists and contributions, reflecting diversity in gender, ethnicity and background
- Recognise that scientific ideas and discoveries come from people across the world
- Challenge stereotypes about who can be a scientist

Teachers use their knowledge of pupils to adapt learning where necessary and work alongside other adults to ensure that barriers to learning are reduced. Practical, enquiry based approaches help all pupils to access scientific concepts and develop working scientifically skills.

In line with our Christian ethos, science teaching at Slyne-with-Hest promotes respect, dignity and fairness, encouraging pupils to value themselves and others and to appreciate the contributions that science makes to society.

Resources

At Slyne-with-Hest St Luke's CE Primary School, a range of resources are used to support the effective teaching and learning of science.

Science equipment and materials are stored centrally in the science cupboard, enabling staff to access practical resources easily and consistently across the school. These resources support hands-on investigations and practical enquiry, helping pupils to develop their working scientifically skills.

In addition to physical resources, teachers make use of online resources and digital materials to support planning, teaching and assessment. These resources enhance learning by providing visual support, up to date scientific information and opportunities for research and discussion.

The Science Subject Leader is responsible for overseeing science resources and ensuring that they are well maintained, organised and fit for purpose. Consumable items are checked regularly and replaced as needed to ensure that lessons can be delivered safely and effectively.

This approach ensures that all pupils have access to the resources they need to engage fully in science learning and to develop confidence and competence as scientists.

Health and Safety

Health and safety is a key priority in the teaching of science at Slyne-with-Hest St Luke's CE Primary School.

The school follows CLEAPSS guidance to ensure that science activities and investigations are carried out safely and appropriately. Teachers use this guidance when planning practical lessons to identify potential risks and to ensure that activities are suitable for the age and stage of the pupils.

Before practical science lessons, teachers provide clear instructions and explanations, including guidance on the safe use of equipment and expectations for behaviour. Pupils are reminded of safety rules and encouraged to work responsibly and sensibly during investigations.

Teachers ensure that appropriate and recommended resources, such as batteries and electrical components, are used in science lessons and that equipment is checked before use. Practical activities are carefully supervised to maintain a safe learning environment for all pupils.

This approach ensures that pupils can engage confidently and safely in practical science, developing their working scientifically skills while understanding the importance of personal and collective responsibility.