



ST.MARY'S RC
PRIMARY SCHOOL

WE PRAY, PLAY & RESPECT ALL

SCIENCE POLICY

Policy purpose and vision

At our school, we believe that science is an essential part of every child's education. Our science curriculum develops pupils' curiosity, knowledge and understanding of the world through engaging, practical and enquiry-based learning. Science enables children to ask questions, investigate ideas, solve problems and make informed decisions about the world around them.

This policy outlines how science is taught in line with the National Curriculum (2014). The school uses the White Rose Science scheme to provide a coherent, knowledge-rich curriculum and Focus4TAPS (Teacher Assessment in Primary Science) to assess and develop pupils' Working Scientifically skills. Together, these approaches ensure that pupils build secure scientific knowledge while progressively developing enquiry skills across biology, chemistry and physics.

1 · Inclusion

Inclusive entitlement and curriculum adaptation

Ensure all pupils, including those with SEND, disadvantaged pupils and higher attainers, access an ambitious science curriculum through appropriate support and challenge.

Teachers adapt learning to ensure all pupils can access the science curriculum. Appropriate scaffolds, practical support, adult guidance and challenge are provided to enable every child to achieve success.

2 · Curriculum and Teaching

Curriculum aims and progression

1. Promote children's enjoyment, curiosity and enthusiasm for science through exciting, practical and enquiry-based learning.
2. Deliver the statutory requirements of the National Curriculum (2014) through a progressive curriculum using the White Rose Science scheme.
3. Develop secure scientific knowledge alongside the Working Scientifically skills needed to investigate, question, observe, test and evaluate scientific ideas.
4. Ensure progression in scientific knowledge and enquiry skills from EYFS to Year 6 through carefully sequenced learning.
5. Encourage pupils to think and work like scientists by asking questions, making predictions, planning investigations, gathering evidence, analysing results and drawing conclusions.
6. Use Focus4TAPS assessment to support accurate teacher assessment of Working Scientifically and identify next steps in learning.
7. Enable pupils to make meaningful links between science and the wider world, recognising the importance of science in everyday life and future careers.
8. Provide high-quality practical experiences which develop independence, resilience, collaboration and critical thinking.

- Promote safe working practices during practical science, ensuring pupils understand how to use equipment responsibly and safely.

Everyday teaching and learning

Science is taught weekly across the school using the White Rose Science scheme, ensuring full National Curriculum coverage and clear progression in knowledge and vocabulary.

- High-quality lessons planned through White Rose Science.
- Practical investigations and first-hand scientific experiences.
- Retrieval practice to strengthen long-term memory.
- Explicit teaching of scientific vocabulary.
- Opportunities for discussion, questioning and scientific reasoning.
- Cross-curricular links where appropriate.
- Use of the outdoor environment to enhance scientific learning.

Working Scientifically

Working Scientifically is embedded throughout every unit rather than taught in isolation.

Teachers provide opportunities for pupils to:

- ask scientific questions;
- make predictions;
- observe over time;
- identify, classify and group;
- carry out comparative and fair tests;
- research using secondary sources;
- identify patterns;
- collect, record and interpret data;
- draw conclusions using evidence;
- evaluate investigations and suggest improvements.

At least one whole-school science investigation will take place each year. All classes will participate in the same investigation with age-appropriate expectations to demonstrate progression in Working Scientifically across the school.

Assessment and responsive teaching

Assessment is an integral part of science teaching.

Teachers assess pupils through:

- ongoing formative assessment during lessons;
- questioning and discussion;
- observation of practical work;
- review of written work;
- White Rose Science end-of-unit assessments to assess substantive knowledge;
- Focus4TAPS focused assessment activities to assess Working Scientifically;

- moderation of teacher judgements to ensure consistency across year groups.

Focus4TAPS provides clear progression in enquiry skills and supports teachers in making accurate assessments of pupils' scientific enquiry throughout KS2, with the approach being developed progressively across the school.

Assessment information is used to identify misconceptions, inform future planning and ensure all pupils make strong progress.

3 · Achievement

Expected outcomes

The impact of our science curriculum is demonstrated through pupils who:

- develop secure scientific knowledge across biology, chemistry and physics;
- use scientific vocabulary accurately and confidently;
- demonstrate progression in Working Scientifically from EYFS to Year 6;
- ask thoughtful scientific questions and investigate independently;
- confidently plan, carry out and evaluate enquiries;
- explain scientific ideas using evidence;
- show curiosity and enthusiasm for science;
- achieve well in science through accurate teacher assessment and White Rose Science assessments;
- are well prepared for the next stage of their scientific education.

Roles and responsibilities

The Science Subject Leader is responsible for:

- leading the strategic development of science across the school;
- supporting teachers in delivering White Rose Science;
- leading the implementation of Focus4TAPS assessment;
- monitoring teaching, learning and assessment;
- analysing attainment and progress data;
- carrying out book looks, pupil voice and learning walks;
- organising moderation activities;
- monitoring progression in Working Scientifically;
- auditing and managing resources;
- providing professional development for staff;
- ensuring science remains a high-profile subject across the curriculum.

Monitoring and review

Monitoring evidence will include lesson observations, book scrutiny, pupil voice, White Rose Science assessment data, Focus4TAPS assessment evidence, moderation records and outcomes from the annual whole-school science investigation.

This policy should be read alongside the school's policies for Assessment, Teaching and Learning, SEND, Equality and Inclusion, Curriculum and Health and Safety.

Revised and adopted by the Governing Body

Date: September 2026

Review Date: September 2029