



Castilion Primary School Science Policy



 White Rose
SCIENCE

Date of Issue: September 2025

Issued by: Science Leader

Review Date: September 2027

Amadeus
Primary Academies Trust

Limitless Learning Together

Castilion Primary School's Science Curriculum

Rationale for Teaching Science

Science is a body of knowledge built up through the experimental testing of ideas. Science is also methodology, 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's them to make sense of the world in which they live through investigation, as well as using and applying process skills. Science is also a collaborative activity where ideas and suggestions are shared and investigated together. Through practical activities and team work, children experience and learn how to work together have mutual respect for one another and value social cohesion.

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:

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.

Attitudes

- Encouraging the development of positive attitudes to science.
- Building 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 self-confidence to enable them to work independently.
- Developing 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.

Skills

- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.
- 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 ICT in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity

about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

The National Curriculum 2013

How science is structured through the school

The National Curriculum sets out the statutory entitlement to learning for all pupils in each Key Stage. The programmes of study sets out what children should be taught.

To provide adequate time for developing scientific knowledge, skills and understanding, each teacher will provide weekly Science lessons. At Foundation level, Science is an integral part of topic learning and should be embedded throughout activities. Cross-curricular links will also be made to other subjects so that pupils can develop and apply their scientific skills.

Teachers plan according to the New National Curriculum Programme of study and the Primary Science Framework. Teachers use this guidance, along with the White Rose Science Scheme for their year group to produce planned units of work outlining objectives to be covered and expected outcomes for each lesson. Teachers also adapt lessons to ensure access to the learning for all pupils.

Foundation Stage

The DfE's Development Matters informs the planning for science for EYFS children. This is the scientific foundational knowledge on which all preceding year groups build. Through their understanding of the world area of learning, EYFS children:

- Explore the natural world around them
- Describe what they see, hear and feel whilst outside
- Understand the effect of changing seasons on the natural world around them
- Reach for and accept objects
- Make choices and explore different resources and materials
- Bring their own interests and fascinations into their learning. This helps them to develop their learning. Respond to new experiences that teachers bring to their attention

KS2 teachers teach science for a minimum of two hours per week.

In KS1 and Foundation stage, a minimum of one third of lessons overall include practical scientific enquiry.

In KS2, a minimum of 50% of lessons overall include practical scientific enquiry.

The school ensures that a broad and balanced science curriculum is followed in which enquiry is at the heart of our children's scientific learning.

In Year 1/ 2 will be covering cycle B for 2024-2025 and cycle A for 2025-2026.

Year 3-4 will be covering cycle B for 2024-2025 and cycle A for 2025-2026

Year 5-6 will be covering cycle B 2024-2025 and cycle A for 2025-2026

Assessment

Formative Assessment

Teachers integrate the use of formative assessment strategies such as effective questioning, clear learning objectives, the use of success criteria and effective feedback and response in their teaching. Within each lesson

Summative Assessment

Using the end of unit test within the White Rose Science Scheme, pupils are assessed against the objectives for each unit. The school's progress tracking system, SONAR, is updated regularly. Progress meetings are held on a half term basis – refer to the Assessment Policy.

All assessments and teaching inform teachers' understanding of a child's ability in science and this is recorded on Classroom Monitor.

Marking

Please refer to our school's Effective Feedback and Marking Policy.

Cross curricular

Opportunities are used to draw mathematical experiences out of a range of activities in other subjects, such as in PE, Science and Geography, to enable children to apply and use Mathematics in both real life and academic contexts and make links.

Health and Safety

The safe use of equipment and consideration of others is promoted at all times. When planning activities, safety issues should be identified in detail in the weekly plans and acted upon accordingly. Children should be made aware of safety issues and, where appropriate, the reasons behind them.