Science Policy 2026

St John Vianney Primary School

Science Policy

Being SJV

Sincere † Joyful † Virtuous

Vision

At St John Vianney Primary School, we believe that science should inspire curiosity, wonder and a lifelong fascination with the world around us. Through high-quality teaching and practical experiences, pupils develop scientific knowledge, enquiry skills and the confidence to ask questions, investigate and draw conclusions. We aim to nurture pupils who recognise the importance of science in everyday life and appreciate its role in understanding and caring for God's creation.

Intent

At St John Vianney Primary School, we aim to provide a broad, balanced and ambitious science curriculum that is accessible to all pupils. Through the teaching of substantive knowledge and disciplinary knowledge, pupils develop a secure understanding of scientific concepts whilst learning to work scientifically. We strive to foster curiosity, resilience and independence, enabling pupils to think critically and communicate their ideas using appropriate scientific vocabulary.

Our curriculum is designed to:

- Develop children's natural curiosity about the world around them.
- Build secure scientific knowledge and understanding.
- Develop working scientifically skills through a range of enquiry types.
- Encourage pupils to question, investigate and evaluate evidence.
- Prepare pupils for future scientific learning and life in an increasingly scientific and technological world.
- Promote awe and wonder in the natural world.

Curriculum Aims

By the end of primary school, pupils will:

- Develop secure scientific knowledge across biology, chemistry and physics.
- Use scientific vocabulary accurately and confidently.
- Ask relevant questions and plan enquiries.
- Make careful observations and take accurate measurements.
- Record, present and interpret scientific data.
- Identify patterns and draw conclusions from evidence.
- Evaluate investigations and recognise how scientific ideas develop over time.
- Understand the relevance of science within everyday life and the wider world.

Implementation

Curriculum Structure

Science is taught in accordance with the National Curriculum for England and the Early Years Foundation Stage Framework. The school uses the Grammarsaurus Science Scheme as the main curriculum resource to support progression, consistency and curriculum coverage across all year groups.

Knowledge is carefully sequenced to ensure pupils build upon prior learning. Each unit is supported by:

- Unit front sheets.
- Knowledge organisers.
- Retrieval opportunities.
- Practical enquiry lessons.
- Scientific vocabulary development.
- End of unit assessment opportunities.

Working Scientifically is embedded throughout the curriculum and taught through the five enquiry types:

- Observing over time.
- Pattern seeking.
- Identifying, grouping and classifying.
- Comparative and fair testing.
- Research using secondary sources.

Early Years Foundation Stage

Science is delivered through the Understanding the World area of learning. Children are encouraged to explore, observe, investigate and ask questions about the natural world. Through play-based learning and first-hand experiences, children begin to develop the skills and curiosity that form the foundation of future scientific learning.

Teaching and Learning

Teachers use a range of teaching approaches to ensure all pupils can succeed, including:

- Direct instruction and modelling.
- Collaborative learning and discussion.
- Practical, hands-on investigations.
- Observational and exploratory activities.

- Problem-solving opportunities.
- Independent enquiry.
- Retrieval practice and regular revisiting of key knowledge.
- Scientific discussions and questioning.
- Opportunities for reflection and evaluation.

Learning is designed to develop both scientific knowledge and working scientifically skills.

Resources

The school uses the Grammarsaurus Science Scheme to support curriculum delivery and assessment. The scheme provides high-quality lesson resources, practical investigations, knowledge organisers, retrieval activities and assessment materials.

Additional resources include:

- Practical science equipment.
- Outdoor learning environments.
- Technology and digital resources.
- Non-fiction texts and reference materials.
- Local environments and visits where appropriate.

Science at Home activities are available on the school website to encourage pupils and families to explore science beyond the classroom through voluntary practical investigations and observations.

Inclusion

SEND

At St John Vianney Primary School, all pupils access an ambitious science curriculum. Teachers adapt learning through quality-first teaching, scaffolding, targeted support, visual resources, practical experiences and appropriate challenge to ensure all pupils can achieve success.

Disadvantaged Pupils

We are committed to ensuring that pupils in receipt of Pupil Premium funding have equal access to high-quality science learning, practical experiences and enrichment opportunities. Staff carefully monitor participation and attainment to ensure that all pupils achieve their potential.

Higher Attaining Pupils

Opportunities for challenge are built into lessons through:

- Higher-order questioning.

- Greater independence in investigations.
- Extended scientific reasoning.
- Analysis and interpretation of more complex data.
- Opportunities to apply learning in unfamiliar contexts.

Enrichment

We seek to inspire pupils beyond the classroom through a range of enrichment opportunities, including:

- Science Week activities.
- STEM-focused learning experiences.
- Visitors and workshops.
- Outdoor learning opportunities.
- Cross-curricular projects.
- Science at Home activities.
- Links with local and national scientific events where appropriate.

Impact

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

- Enjoy science and are enthusiastic learners.
- Retain and apply key scientific knowledge.
- Use scientific vocabulary accurately.
- Ask questions and think critically.
- Demonstrate secure working scientifically skills.
- Make good progress throughout the curriculum.
- Are well prepared for the next stage of their education.

Assessment and Monitoring

The impact of the curriculum is evaluated through:

- Ongoing teacher assessment.
- Retrieval activities.
- Pupil discussion and questioning.
- Observation of practical work.
- End of unit assessments.
- Book scrutiny.
- Pupil voice activities.
- Lesson visits and learning walks.
- Monitoring by the Science Subject Leader.

Assessment information is used to identify strengths, address misconceptions and inform future planning. Teacher professional judgement remains central to all assessment decisions.

Conclusion

At St John Vianney Primary School, we are committed to providing a high-quality science education that develops curiosity, knowledge and enquiry skills. Through rich learning experiences and an ambitious curriculum, we prepare pupils to understand and engage with the world around them while fostering a lifelong appreciation of science.