

Science Policy for St Nicholas Catholic Primary School

Introduction

This Science policy outlines the purpose, aims, statutory requirements, and practical approaches for delivering outstanding Science education at St Nicholas. It is designed in accordance with the 2014 National Curriculum for Science, Ofsted's Education Inspection Framework (EIF 2019), and statutory guidance including the Equality Act 2010, SEND Code of Practice 2015, and Health and Safety at Work Act 1974. The policy ensures a positive, inclusive working environment and is adaptable for mixed-age classes, supporting all pupils to develop scientific knowledge, skills, and curiosity.

Aims

- Develop pupils' scientific knowledge and conceptual understanding across biological, chemical, and physical sciences.
- Foster excitement, curiosity, and enthusiasm for Science, enabling pupils to ask questions and investigate the world around them.
- Equip pupils with scientific enquiry skills, including observing, classifying, fair testing, pattern seeking, and researching.
- Ensure progression in substantive and disciplinary concepts, preparing pupils for future learning and employment.
- Promote inclusion, equality, and positive attitudes towards Science for all pupils, regardless of background or ability.
- Link Science learning to real-life contexts, cross-curricular themes, and wider opportunities.
- Support pupils to use scientific vocabulary accurately and articulate their learning confidently.

Statutory Requirements

- Deliver the full breadth and depth of the 2014 National Curriculum for Science, covering all statutory programmes of study and attainment targets.
- Embed 'Working Scientifically' skills across all content and year groups.
- Comply with the Health and Safety at Work Act 1974 and CLEAPSS guidance for safe practical work, including risk assessments and safe storage/use of equipment.
- Adhere to Keeping Children Safe in Education (KCSIE) statutory guidance for safeguarding during practical activities.
- Ensure equal access to Science for all pupils, in line with the Equality Act 2010, with reasonable adjustments for SEND.
- Plan inclusively and adapt resources for pupils with additional needs, following the SEND Code of Practice 2015.
- Report regularly to parents on pupil progress in Science.

Curriculum Coverage

The Science curriculum at St Nicholas encompasses:

- Biological sciences: plants, animals (including humans), living things and their habitats, evolution and inheritance.

- Chemical sciences: everyday materials, rocks, states of matter, properties and changes of materials.
- Physical sciences: light, sound, electricity, forces and magnets, earth and space.
- Working Scientifically: enquiry skills including observing, questioning, testing, classifying, using equipment, gathering and recording data, planning investigations, controlling variables, and reporting findings.

Curriculum coverage is broad and balanced, ensuring pupils experience practical work, scientific enquiry, and conceptual understanding across all areas. Science is taught through discrete lessons and cross-curricular links, with enrichment activities such as STEM clubs and Science Week.

Curriculum Implementation

- Science is planned using high-quality schemes (e.g., Kapow), ensuring coherence, progression, and adaptation for mixed-age classes.
- Long-term and medium-term plans map coverage and progression in knowledge and enquiry skills.
- Lessons are structured to include hands-on investigations, collaborative learning, and real-life contexts.
- Teachers use a range of resources, including practical equipment, visual aids, digital tools, and outdoor learning environments.
- Differentiation is achieved through flexible grouping, scaffolding, and adaptation of tasks for diverse needs.
- Practical work is frequent, meaningful, and conducted safely, with risk assessments and supervision.
- Cross-curricular links are made to enhance relevance and engagement.
- Science is given sufficient curriculum time, especially in Key Stage 2, avoiding curriculum narrowing.

Assessment

- Formative assessment is embedded in every lesson through questioning, feedback, observation, and self/peer assessment.
- Summative assessment is conducted at the end of units and key stages, using teacher judgements against programme of study and attainment targets.
- Assessment identifies misconceptions, informs planning, and supports progression.
- Pupils' scientific thinking, reasoning, and use of evidence are assessed through practical work, written outcomes, and discussions.
- Assessment criteria are clear, consistent, and shared with pupils.
- Progress and attainment in Science are tracked and reported to parents.

Roles and Responsibilities

Role	Responsibility
Headteacher	Strategic leadership, ensuring statutory compliance, monitoring provision and impact
Science Subject Lead	Curriculum planning, staff training, resource management, monitoring quality and progression

Class Teachers	Delivering Science lessons, adapting for inclusion, assessing pupil progress, ensuring safety
Support Staff	Assisting with differentiation, practical work, and supporting pupils with additional needs
Pupils	Engaging actively, following safety guidance, articulating learning, participating in enquiry
Governors	Overseeing policy implementation, supporting monitoring and evaluation

Inclusion

- Science is accessible to all pupils, regardless of gender, ethnicity, disability, or background.
- Tasks are differentiated and resources adapted for pupils with SEND, EAL, or other additional needs.
- Reasonable adjustments are made in line with the Equality Act 2010 and SEND Code of Practice 2015.
- Mixed-age classes benefit from flexible grouping, peer support, and differentiated learning objectives.
- Positive attitudes and cultural diversity in Science are celebrated.
- Vulnerable pupils are supported and supervised during practical work.

Professional Development

- Staff receive ongoing CPD in Science pedagogy, subject knowledge, and safe practical work.
- Training includes use of high-quality schemes (e.g., Kapow), assessment strategies, and inclusion.
- Subject lead attends external training and disseminates best practice.
- Staff collaborate to share expertise and reflect on practice.
- Health and safety training is provided for all staff involved in practical Science.

Inspectorate Expectations

- The Science curriculum is ambitious, coherently planned, and sequenced for progression.
- Coverage reflects the breadth and depth of the National Curriculum, with clear progression in knowledge and enquiry skills.
- Teaching enables secure understanding, application of enquiry skills, and frequent, meaningful practical work.
- Lessons are engaging, inclusive, and adapted for all pupils, including those with SEND.
- Assessment is used effectively to check understanding, inform teaching, and support progression.
- Pupils demonstrate curiosity, enthusiasm, and confidence, using scientific vocabulary accurately.
- Teachers have strong subject knowledge, supported by ongoing CPD.
- Science is given sufficient curriculum time and is not narrowed.
- Leaders monitor provision, ensuring consistency, progression, and impact.

Monitoring and Review

- The Science subject lead and senior leaders monitor curriculum implementation, teaching quality, and pupil outcomes.
- Lesson observations, work scrutiny, pupil voice, and assessment data inform evaluation.
- Provision is reviewed termly, with action plans for improvement.
- Policy and practice are updated annually, reflecting statutory changes and best practice.
- Governors support monitoring and review, ensuring accountability.