

1. Policy Statement and Rationale

At Newham Bridge, we believe science plays a core role in helping children understand the world around them, develop curiosity, critical thinking, and problem-solving skills. Our science curriculum aims to inspire pupils to explore, question, and investigate through meaningful, practical experiences.

Science is taught in line with the National Curriculum and supports pupils to develop both: Substantive knowledge – key scientific facts, concepts, and vocabulary Disciplinary knowledge – the skills required to work scientifically.

Our approach ensures that all pupils, regardless of background or ability, have access to a high-quality science education that prepares them for future learning and everyday life.

2. Curriculum Intent

The intent of our science curriculum is to ensure that all pupils: develop a secure understanding of key scientific concepts; acquire and apply scientific enquiry skills progressively; use scientific language confidently and accurately; understand the relevance of science to the real world and are inspired to see themselves as scientists and problem-solvers.

We aim for pupils to know more, remember more, and explain more as they move through the school, building on prior learning and deepening understanding over time.

3. Curriculum Implementation

Early Years Foundation Stage (EYFS)

In EYFS, science learning is taught through the *Understanding the World* area of the curriculum. Children are encouraged to: observe and explore their environment; ask and answer questions; talk about changes, similarities, and differences; care for plants, animals, and their surroundings.

These early experiences develop curiosity, vocabulary, and enquiry skills that form the foundation for later scientific learning.

Key Stages 1 and 2

From Key Stage 1 onwards, science is taught through discrete units that: follow the National Curriculum programmes of study; are carefully sequenced to ensure clear progression; revisit and build on prior knowledge.

Lessons combine direct teaching with practical investigations and discussion. Pupils are taught to work scientifically through asking questions and making predictions; planning and carrying out

investigations; observing and measuring; recording data and results and drawing conclusions and explaining findings.

Progression of enquiry skills and scientific knowledge is mapped across year groups to ensure increasing depth, challenge, and independence.

Teaching and Learning Approaches

- Lessons have a clear learning focus and purpose
- Practical, hands-on learning
- Scientific vocabulary is explicitly taught and displayed
- Discussion and questioning are used to develop reasoning and problem solving
- Misconceptions are identified and addressed

Teachers are supported through clear curriculum guidance and secure subject knowledge to deliver high-quality science teaching. Where appropriate, teaching and learning is enriched through outdoor learning; real-world contexts and links to inspirational scientists and careers.

4. Inclusion and Equal Opportunities

Science at Newham Bridge is inclusive and accessible to all pupils. Teaching is adapted to ensure that every child can participate and succeed. Support may include adapted activities and resources; visual aids and practical equipment; targeted questioning and opportunities for stretch and challenge.

Pupils with special educational needs and disabilities (SEND) are supported to engage fully with scientific learning, while more able pupils are challenged through deeper enquiry and reasoning tasks.

5. Safe Practice

Safety is a priority in all science lessons. Teachers ensure risk assessments are followed; equipment is used safely and appropriately, and pupils are taught to work responsibly during investigations.

Clear expectations and routines help pupils develop safe working practices from an early age.

6. Assessment

Assessment in science is used to support learning and inform future teaching.

Teachers assess pupils' understanding through questioning and discussion; observation during investigations; review of written work and pre and post-unit assessments.

Assessment focuses on both knowledge and enquiry skills. Outcomes are used to identify strengths, gaps, and next steps in learning.

7. Curriculum Impact

The impact of our science curriculum is that pupils listen, contribute and engage in science lessons; can understand and use some scientific vocabulary; ask questions and discuss ideas to deepen understanding; use prior learning and skills when working to solve scientific problems and make connections between learning and science in everyday life.

Pupils should leave Newham Bridge well prepared for further scientific learning, with a positive attitude towards science and the ability to think and work scientifically.

8. Monitoring and Review

The science curriculum is monitored through lesson observations and learning walks; scrutiny of pupil work; pupil and staff voice and assessment outcomes.

This policy is reviewed regularly to ensure it reflects current practice, curriculum developments, and statutory guidance.

During the academic year 2025-26, the school is currently working towards renewing its Primary Science Quality Mark (PSQM).

Reviewed: April 2026

Next Review: April 2027