



Science Policy

Brize Norton Primary School

We SHINE for ourselves and each other with kindness.

Strive, Help, Inspire, Nurture, Excel

Adopted by school LGB:	Brize Norton Primary School
Date:	March 2026
Review Date:	March 2029

Rationale

Science is a core subject within our curriculum because it enables pupils to understand the world around them and to develop the skills needed to question, investigate and think critically. Our approach, based on the Kapow Primary Science scheme, ensures that learning is coherent, progressive and rooted in meaningful experiences. Kapow's three strands — Scientific Knowledge and Understanding, Working Scientifically and Science in Action — provide a balanced framework that supports both conceptual understanding and practical enquiry.

We believe that science should nurture children's natural curiosity and encourage them to explore ideas through hands-on investigation. By connecting scientific concepts to real-life contexts, we help pupils recognise the relevance of science in everyday life, in technological developments and in global challenges. Our curriculum also aims to broaden pupils' awareness of the diverse range of people who work in science and the many ways scientific thinking contributes to society.

Aims

Our science curriculum aims to ensure that all pupils:

- ✓ Develop secure scientific knowledge and understanding

Pupils build a strong foundation of key concepts across biology, chemistry and physics. Knowledge is sequenced carefully so that ideas deepen over time, misconceptions are addressed and pupils can make meaningful connections between topics.

- ✓ Become confident and capable scientific investigators

Through the strand of Working Scientifically, pupils learn to ask questions, plan and carry out enquiries, collect and interpret data, and draw conclusions based on evidence. They develop accuracy, independence and resilience as they engage in practical work.

- ✓ Understand how science operates in the real world

The Science in Action strand ensures that pupils appreciate the role of science in everyday life, industry, health, technology and the environment. They learn about diverse scientists and STEM careers, helping to challenge stereotypes and raise aspirations.

- ✓ Communicate scientific ideas clearly and accurately

Pupils use appropriate scientific vocabulary, diagrams, charts and written explanations to express their understanding. They learn to justify their thinking and engage in scientific discussion with increasing confidence.

- ✓ Develop positive attitudes towards science

We aim to foster curiosity, open-mindedness and a willingness to explore new ideas. Pupils learn to value evidence, consider alternative explanations and reflect on the impact of scientific developments on society and the environment.

- ✓ Experience an inclusive and accessible science curriculum

All pupils, including those with SEND, are supported to participate fully in scientific learning. Adaptive teaching ensures that every child can engage in practical enquiry and achieve success.

2. Intent

Our intent is to deliver a science curriculum that inspires curiosity, deepens understanding and equips pupils with the knowledge and skills needed to explore and explain the world around them. Science is taught as a core subject, with high expectations for all learners.

The first strand, Scientific Knowledge and Understanding, ensures that pupils develop secure conceptual understanding across biology, chemistry and physics. Knowledge is sequenced carefully so that ideas build progressively and misconceptions are addressed early. Scientific vocabulary is taught explicitly and revisited regularly to support accurate communication.

The second strand, Working Scientifically, develops pupils' enquiry skills through practical, hands-on experiences. Children learn how to ask questions, plan investigations, make predictions, observe closely, measure accurately and draw conclusions based on evidence. These skills are embedded within each unit rather than taught in isolation, enabling pupils to apply them meaningfully.

The third strand, Science in Action, helps pupils understand the relevance of science in everyday life. They learn about real-world applications, diverse scientists and STEM careers, and the role of science in society, technology and environmental sustainability. This strand supports pupils in recognising science as a dynamic and inclusive field.

3. Implementation

Science is taught weekly following our bespoke long-term plan. Due to our combined classes, and cross Key-Stage class, we have mapped the National Curriculum topics with great care to ensure coverage and clear progression is not compromised and learners are met the appropriate knowledge and skills where ever they fall in the 3-year learning cycle taking into account the end of Key Stage expectations.

Lessons begin by revisiting prior learning to strengthen retention and make connections with new content. Teachers introduce new concepts using models, demonstrations and practical examples that make abstract ideas accessible.

Practical enquiry is central to our approach. Pupils experience a balance of enquiry types, including fair tests, pattern seeking, classification, research and observation over time. Teachers provide opportunities for pupils to discuss their ideas, justify their thinking and reflect on the reliability of their results. Recording methods vary by age and purpose, including diagrams, tables, charts and written explanations.

Inclusion is a key principle. Teachers adapt tasks and provide scaffolds so that all pupils, including those with SEND, can participate fully in scientific learning. Higher-attaining pupils are challenged through deeper questioning, open-ended investigations and opportunities to apply their understanding in unfamiliar contexts.

Real-world connections are woven throughout the curriculum. Lessons highlight how scientific ideas relate to everyday experiences, local contexts and global issues. Enrichment opportunities such as Science Week, educational visits and visitors from STEM fields further enhance pupils' engagement and understanding.

4. Impact

The impact of our science curriculum is seen in pupils who can articulate scientific ideas clearly, apply enquiry skills confidently and recognise the importance of science in their lives. Pupils demonstrate secure understanding through discussion, written work and practical outcomes. They show curiosity, resilience and respect for evidence.

Assessment is ongoing and informs teaching. Teachers use questioning, observation, low-stakes quizzes and review of work to monitor progress across the three strands. The science lead reviews planning, books and pupil voice to ensure consistency, progression and balance. Findings inform staff development and curriculum refinement.

By the end of each key stage, pupils have developed the knowledge, skills and attitudes needed for the next stage of their scientific education. They leave our school equipped not only with scientific understanding but also with the confidence to explore, question and think critically about the world.

5. Roles and Responsibilities

The science lead is responsible for monitoring curriculum delivery, supporting staff, reviewing resources and ensuring alignment with Kapow Primary. Teachers are responsible for delivering high-quality lessons, assessing progress and ensuring that all pupils are included and challenged. Senior leaders support the strategic development of science and ensure adequate resourcing.

6. Review

This policy will be reviewed every two years, or sooner if significant changes occur in curriculum guidance or school priorities.

Appendix A – Long Term Plan – Lower School

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cycle A	Forces and Space – Seasonal Change	Making Connections: Investigating Science through stories	Energy – Light and Shadows	Animals – Sensitive Bodies	Plants – Introduction to Plants	Teeth and Eating (STEM)
Cycle B	Materials – Everyday materials	Living Things - Habitats	Sounds and Hearing (STEM)	Animals – Comparing Animals	Plants – Plants and Growth	Making Connections: Plant Based materials
Cycle C	Materials – uses of Everyday Materials	Living Things – Microhabitats	Forces – Forces and Movement (STEM)	Making Connections: TBC	Plants – Plant Reproduction	Animals Including Humans – Life Cycles and Health

Appendix B – Long Term Plan – Upper School

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cycle A	Animals including Humans – Digestion and Food	Energy – Electricity and Circuits	Forces and Space- Unbalanced Forces	Material – Rocks and Soil *Science week	Living Things – Classification and Changing Habitats	Materials – Properties and Changes
Cycle B	Animals Including Humans – Circulation and Health	Energy – Circuits, Batteries & switches	Forces and Space – Forces and magnets	Materials – States of Matter *Science week	Living Things - Classifying Big and Small	Energy – Sound and Vibration
Cycle C	Animals – Movement and Nutrition	Energy – Light & reflection	Forces and Space – Earth and Space	Materials – Mixtures & Separation *Science week	Living Things – Evolution and Inheritance	Living Things – Life cycles and Reproduction

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cycle A	Y1: Forces and Space – Seasonal Change	Making Connections: Investigating Science through stories	Y3: Energy – Light and Shadows	Y1: Animals – Sensitive Bodies	Y1: Plants – Introduction to Plants	Year 3: Teeth and Eating (STEM)
Cycle B	Y1 – Materials – Everyday materials	Y2: Living Things - Habitats	Y1: Sounds and Hearing (STEM)	Y1 Animals – Comparing Animals	Y2: Plants – Plants and Growth	Making Connections: Plant Based materials
Cycle C	Y2: Materials – uses of Everyday Materials	Y2: Living Things – Microhabitats	Y2: Forces – Forces and Movement (STEM)	Making Connections: TBC	Y3: Plants – Plant Reproduction	Y2: Animals Including Humans – Life Cycles and Health