



Barton Seagrave Primary School Science Policy

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Signed:
Science Co-ordinator

Signed:
Chair of Governors

Signed:
Head Teacher

*"Science knows no country, because knowledge belongs to humanity,
and is the torch which illuminates the world." – Louis Pasteur*

Barton Seagrave Primary School

Science Policy



Science Vision Statement

At Barton Seagrave Primary School, our vision for science is to equip all children with the knowledge, skills and confidence to understand the world around them and face the future with curiosity and resilience. Through a carefully sequenced, enquiry-based curriculum, we develop pupils who can think critically, solve problems and adapt to new challenges. We believe science plays a vital role in building confident learners who are prepared for life beyond the classroom, able to apply their learning in a range of contexts and contribute positively to the world around them.

1. Intent

At Barton Seagrave Primary School, we aim to educate children to confidently face the future. Science plays a key role in achieving this by developing pupils' curiosity, resilience and ability to think critically about the world around them.

We provide a broad, balanced and engaging science curriculum that develops both scientific knowledge and enquiry skills. Through high-quality teaching and practical experiences, pupils build confidence in their own abilities and develop the skills needed to adapt to new challenges and continue learning throughout life.

Our curriculum is carefully sequenced to ensure that knowledge builds progressively over time, enabling pupils to make connections and retain key scientific concepts. Through this, pupils develop independence, problem-solving skills and a growing understanding of how science impacts everyday life.

We aim for all pupils to:

- Develop secure scientific knowledge across biology, chemistry and physics
- Build and apply scientific enquiry skills
- Use appropriate scientific vocabulary confidently
- Develop curiosity, resilience and independence
- Understand the role of science in the wider world
- Respect the environment and living things
- Work collaboratively and value the ideas of others

2. Implementation

2.1 Curriculum Structure

Science is taught in accordance with the National Curriculum (2014) and the Early Years Foundation Stage Framework.

Our curriculum:

'Educating Children to Confidently Face the Future'

- Is progressive and carefully sequenced
- Builds on prior knowledge to support long-term retention
- Balances knowledge and working scientifically
- Is taught through discrete lessons and cross-curricular links



Our curriculum enables teachers to adjust plans to meet the needs of individuals or groups of children. This structure supports pupils in developing the confidence and adaptability needed to apply their learning in a range of contexts.

2.2 Early Years Foundation Stage (EYFS)

In EYFS, Science is taught through *Understanding the World*.

Children are encouraged to explore, observe and ask questions about their environment. Through play-based and practical experiences, they begin to develop curiosity, confidence and the ability to investigate the world around them.

2.3 Key Stage 1

Pupils begin to develop confidence in their scientific thinking by:

- Asking questions
- Observing closely
- Carrying out simple tests
- Recording findings in a variety of ways

They are supported to express their ideas and begin to understand how science helps them make sense of everyday experiences.

2.4 Key Stage 2

Pupils build on prior learning and develop greater independence in their scientific enquiry. They:

- Plan and carry out investigations
- Use a range of equipment accurately
- Record and present data in different ways
- Draw conclusions and evaluate their findings

Through this, pupils develop resilience, problem-solving skills and the confidence to explore more complex scientific ideas.

2.5 Working Scientifically

Working scientifically is embedded across all year groups and supports pupils in becoming confident, independent learners.

Pupils develop skills in:

- Questioning and predicting
- Planning investigations
- Observing and measuring

'Educating Children to Confidently Face the Future'

- Recording and analysing data
- Drawing conclusions and evaluating



They experience a range of enquiry types, enabling them to adapt their approach and apply their learning flexibly.

2.6 Teaching and Learning

Teachers use a range of strategies to engage pupils and support learning, including practical activities, discussion and enquiry-based learning.

Children record their learning in a variety of ways, including written work, diagrams, tables, graphs and oral explanations.

Teaching is adapted to meet the needs of all pupils, ensuring that every child can experience success and develop confidence in their abilities.

2.7 Inclusion and Differentiation

At Barton Seagrave Primary School, all pupils are entitled to a high-quality science education.

We ensure:

- Appropriate support for pupils with SEND
- Challenge for more able pupils
- Equal opportunities for all

This inclusive approach ensures that all pupils develop confidence and belief in their ability to succeed in science.

2.8 Cultural Capital and Enrichment

Science contributes to pupils' cultural capital by broadening their experiences beyond their immediate environment and preparing them for future learning and careers.

Through enrichment opportunities such as whole-school science themed days during British Science Week, visitors, school trips and real-world applications, pupils develop curiosity, adaptability and an understanding of how science is used in everyday life. These experiences support pupils in becoming confident individuals who are ready to engage with the wider world.

2.9 Wellbeing

At Barton Seagrave Primary School, science supports pupils' wellbeing by providing opportunities for outdoor learning, collaboration and developing resilience through enquiry-based activities.

Through practical investigation and problem-solving, pupils learn to persevere, adapt and build confidence in their ability to overcome challenges. This supports our commitment to helping children develop the personal belief that they can succeed, work effectively with others and cope in a range of situations.



3. Impact

3.1 Assessment

Assessment is used to inform teaching and support pupil progress.

We use:

- Ongoing formative assessment
- End-of-unit summative assessment
- Assessment of both knowledge and working scientifically

Progress is tracked termly using our school assessment records.

3.2 Outcomes

By the end of each key stage, pupils will:

- Have secure scientific knowledge
- Be able to think and work scientifically
- Use scientific vocabulary accurately
- Demonstrate curiosity and enthusiasm for learning
- Show confidence in applying their knowledge and skills

4. Monitoring and Evaluation

Science is monitored by the Science Co-ordinator and Senior Leadership Team through:

- Book scrutiny
- Lesson observations
- Pupil voice
- Data analysis

This ensures that teaching remains high quality and continues to support pupils in becoming confident, capable learners. Class teachers are responsible for monitoring pupil understanding through regular marking of written work in line with our school marking and feedback policy.

5. Roles and Responsibilities

Science Co-ordinator:

- Provides strategic leadership
- Supports staff development
- Monitors teaching and learning
- Manages resources
- Keeps up to date with developments

Teachers:

- Deliver high-quality science lessons
- Assess pupil progress
- Ensure safe and inclusive practice



6. Resources

Resources are centrally stored and maintained to support effective teaching and learning. Staff are responsible for ensuring resources are used safely and returned appropriately.

7. Health and Safety

Teachers plan activities carefully and follow relevant safety guidance.

Pupils are taught to work safely, handle equipment responsibly and develop good scientific practice.

8. Partnership with Parents

Parents are supported to engage with their child's learning through communication about curriculum content. Progress and achievement in science is reported to parents through end of year reports and during autumn and spring parent meetings.

9. Policy Review

This policy will be reviewed regularly to ensure it reflects current guidance, school priorities and best practice.