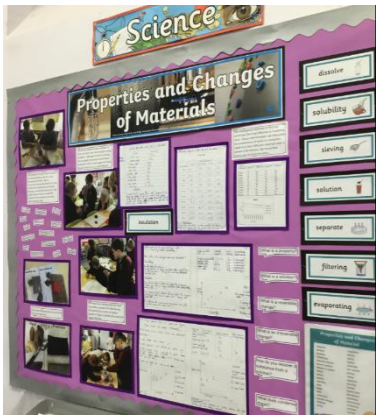
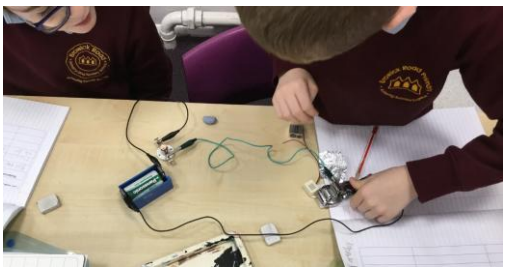
Browick Road Primary and Nursery School

*Achieving Success Together*

# Curriculum Overview: Science









# School Vision

Our Teachers… are **creative**, **engaging** and **adventurous**, offering an excellent curriculum that challenges and inspires to ensure every child is **ACHIEVING**.

Our Children… learn **resilience** and are **happy**, **confident** and **independent** learners who thrive on celebrating their **SUCCESS**.

Our School…is a **safe** and **nurturing** environment, where everyone works **TOGETHER** to role model our core values of **respect**, **trust** and **honesty**.

# Intent

At our school, we believe that a high-quality science education provides the foundations for understanding the world through the disciplines of biology, chemistry and physics. Our science curriculum is designed in line with the National Curriculum and is underpinned by the principles of the CUSP (Curriculum with Unity Schools Partnership) curriculum.
Our intent is to ensure that all pupils:

- Develop secure scientific knowledge and conceptual understanding.
- Build the skills needed to work scientifically, including questioning, observing, investigating, recording and drawing conclusions.
- Acquire and use accurate scientific vocabulary to explain ideas clearly.
- Develop curiosity, resilience and enjoyment of science.
- Are well prepared for the next stage of their education, including Key Stage 3.

At our school, science is inclusive and accessible to all pupils, including those with SEND and disadvantaged backgrounds, so that every child can see themselves as a scientist.

# Early Years Foundation Stage (EYFS)

In EYFS, science forms part of the Understanding the World area of learning. At our school, children are encouraged to explore, investigate and make sense of the world around them through first-hand experiences and play-based learning.
Children develop early scientific skills by:

- Observing and exploring the natural world.
- Asking questions about what they notice.
- Identifying similarities and differences.
- Noticing change over time.
- Talking about their ideas using developing vocabulary.

Opportunities for science learning may arise through planned activities or from children's interests, such as exploring seasonal changes, caring for plants, investigating materials or observing living things. These experiences provide a strong foundation for science learning as children move into Key Stage 1.

Furthermore, we understand that science intersects with a wide range of disciplines, including mathematics, engineering, computing, and geography. Making these connections is crucial for engaging our students and showcasing the diverse opportunities that science presents.

# Implementation

Science is taught weekly across the school, following the CUSP Science curriculum, which is fully aligned with the National Curriculum. The curriculum is carefully sequenced to ensure progression in both knowledge and scientific enquiry skills from EYFS through to Year 6.

## Curriculum Structure

- Science units are organised into distinct modules covering biology, chemistry and physics.
- Prior learning is regularly revisited to support retention and deepen understanding.
- Knowledge builds progressively within and across year groups.

There is a map of our curriculum structure at the end of this document.

## Teaching and Learning

- Lessons have clear learning objectives linked to the curriculum.
- Teachers model scientific thinking and the accurate use of vocabulary.
- Practical investigations are planned where appropriate to support understanding.
- Misconceptions are identified and addressed through discussion and targeted teaching.

**Working Scientifically Working scientifically is at the heart of science teaching at our school and is embedded throughout the curriculum from EYFS to Year 6.**

## Pupils are supported to:

- Ask questions and develop simple enquiries.
- Plan and carry out investigations.
- Use equipment safely to make observations and measurements.
- Record results in appropriate ways.
- Interpret findings and draw conclusions.
- Use evidence to explain ideas and identify patterns.

**Scientific enquiry skills develop progressively across the school, ensuring pupils build confidence and independence over time.**

- Practical activities support access for pupils with differing literacy levels.
- Scientific vocabulary is explicitly taught and revisited to support understanding.

# Impact

The CUSP curriculum not only meets but exceeds the expectations of the National Curriculum. We believe that there is no limit to what pupils can achieve when the framework and practices are grounded in evidence-led principles.

The impact of our science curriculum is that pupils:

- Demonstrate age-appropriate scientific knowledge and understanding.
- Show clear progression in both scientific knowledge and enquiry skills over time.
- Can explain scientific ideas using accurate vocabulary.
- Engage positively with science and show curiosity about the world around them.
- Are prepared for the demands of the secondary science curriculum.

Impact is monitored through work scrutiny, pupil voice, assessment information and lesson observations, ensuring that our science curriculum continues to meet the needs of all pupils.

**Enrichment:**

- Science week visitors
- Annual STEM competitions
- STEM ambassadors visits e.g. Norfolk Wildlife and local businesses
- Forest Schools
- School council
- Eco-themed assemblies and pupil-led assemblies in response to pupils' curiosity and concern for the planet.
- Science Cafes
- Big Pedal to school week
- Gardening club
- Gardening on our school allotmen

# Science Curriculum at Browick Road Primary School & Nurser

| | BIOLOGY | | CHEMISTRY | | PHYSICS | |
|---|---|---|---|---|---|---|
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| EYFS – Nursery | Seasonal changes, caring for our environment | Introduction to the Earth in space (naming Earth, moon, sun) | | Spring, seasonal changes, plant life cycles, what plants need to grow, where our food comes from | Exploring materials and forces | |
| EYFS – Reception | Seasonal changes | Animal life cycles, habitats and hibernation | Plant life cycles – growing beans, learning to name the parts of a plant | Animal life cycles (frog)<br>Floating and sinking | Insect habitats, caring for plants | Caring for our environment |
| Year 1 | • Seasonal changes and daily weather<br>• Introduce plants (trees) | • Introduce plants (trees) continued<br>• Animals, including humans | • Everyday materials | • Revisit 1: Animals, including humans | • Plants | • Revisit Plants, Animals including humans, Seasonal change and weather |
| Year 2 | • Living things and their habitats<br>• Animals, including humans | • Animals, including humans (continued) | • Uses of everyday materials | • Uses of everyday materials (continued)<br>• Revisit animals, including humans/ materials | • Plants | • Plants (continued)<br>• Revisit Living things and their habitats / Animals, including humans |

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---|---|---|---|---|---|---|
| Year 3 | • Rocks | • Animals, including humans | • Forces & Magnets | • Forces & Magnets (continued) | • Plants | • Plants |
| | • Animals, including humans | • Revisit Rocks | | • Plants | | • Light |
| Year 4 | • Living things and their habitats | • States of matter | • Animals, including humans | • Animals, including humans (continued) | • Electricity | • Sound |
| | • States of matter | | | | | |
| Year 5 | • Properties and changes of materials | • Properties and changes of materials (continued) | • Forces | • Earth & Space | • Living things & their habitats | • Living things & their habitats |
| | | • Animals, including humans | | | | • Forces continued |
| Year 6 | • Light | | • Animals, including humans | • Electricity | • Living things and their habitats | • Evolution & Inheritance |