



Broom Leys Primary School



Science

Intent

At Broom Leys, it is our intent to provide a high-quality science curriculum that enables children to leave broom Leys as keen scientists who show an understanding of the world around them by asking 'why' questions. They will be passionate learners of science and its impact on past, present and future technologies. Children will have developed a curiosity for the wider world through scientific enquiry. They will be confident in using practical skills to carry out a range of scientific investigations.

We aim to provide all children with opportunities to acquire specific skills and knowledge which will support them throughout their time at school when thinking and working scientifically. This will enable children to become enquiry-based learners, collaborating and communicating through rich experiences when researching, investigating and evaluating.

Within our curriculum, key skills and knowledge have been mapped out carefully to ensure clear progression from EYFS to Year 6. This allows units to be revisited and ideas to be further developed and built upon as children move through each year group. By focusing on retrieval of previously learned skills and knowledge, we ensure that all children develop and enrich their schema, embedding their gained knowledge into long-term memory: they know more and remember more. We are confident that this will increase children's passion and interest when learning about science and the world around us as they will be able to make valuable connections to science within their learning both within and outside of school.

Our focus on prior learning supports teachers to understand where their science units fit within the bigger picture. As a result, teachers are able to ensure that children develop and deepen their understanding of a broad vocabulary of scientific concepts and terminology which they will carry through their school life.

Cross-curricular links have also been identified to ensure that relevant and meaningful links are made within other areas of the curriculum. Furthermore, our science curriculum is planned so that we expose children to well-known scientists who have had an impact on our world.

We aspire to provide every child with a broad and balanced science curriculum that will prepare them for opportunities, responsibilities and experiences later in life.

Implementation

Broom Leys Science whole school curriculum map:

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
EYFS	Understanding the World - begin to make sense of their expanding world and their place within it through exploring.	Understanding the World - be confident to explore the school environment and continue to care for it.	Understanding the World - observe and discuss similarities, differences, patterns and change in nature, materials and living things.	Understanding the World - observe and discuss similarities and differences between themselves and others.	Understanding the World - explore the natural world around them, making observations and drawing pictures of animals and plants.
Year 1	Seasonal Changes (ongoing throughout the year)	Animals including humans	Everyday materials	Plants	
Year 2	Living things and their habitats	Uses of everyday materials	Animals including humans	Plants	
Year 3	Light	Rocks and soils	Animals including humans: movements and feeding	Plants	Forces and magnets
Year 4	Sound	Electricity	Everyday materials: States of matter	Animals including humans: teeth, digestion and food chains	Living things and their habitats: classification and habitats
Year 5	Everyday materials: properties of changing materials	Earth and Space	Forces	Living things and their habitats: life processes of animals and plants	Animals including humans: changes in humans
Year 6	Animals including humans: our bodies	Living things and their habitats: Classification	Evolution and inheritance	Light (and sight)	Electricity

At Broom Leys, teachers constantly strive to create positive working environments for children, which reinforces the high expectation that all children have the capacity to achieve well and strive to become scientific learners.

Science units have been carefully planned to ensure progression not only through the year but also through the children's time at school. Each year group will build upon the knowledge gained from prior year groups therefore developing depth of understanding and a progression of skills that will then become embedded in their long-term memory. Our medium-term plans have been carefully developed to include opportunities for children to cover the five types of scientific enquiry. By doing so, this will help the children to find out more about the world and how it works. This also links in with the Working Scientifically skills, which are focused on throughout each unit to ensure that the skills children gain are systematically developed throughout their time at Broom Leys. We have also allowed opportunities for events such as British Science Week, where children can explore broader aspects of science and apply the skills and knowledge they have learned.

EYFS

In Early Years, children are taught science through the key area of learning set out within the EYFS Statutory Framework. Through a broad range of teacher-led, child-initiated and continuous learning opportunities, children will be taught to:

- Begin to make sense of their expanding world and their place within it through exploring, investigating and problem solving e.g. by exploring the school grounds, playing in the spinney, the different buildings they will visit within school.
- Look closely at similarities, differences, patterns and change in nature, materials and living things e.g changes over time, seasons, environment around them, different materials and how they can be used.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
- class.

Impact

Our Science curriculum is carefully planned to ensure progression for every child. It is a fun and engaging curriculum that provides children with the foundations and knowledge for understanding about the world. Our engagement with the local environment ensures that children learn through varied and first-hand experience of the world around them. By giving children these hands-on experiences, as well as opportunities with STEM ambassadors, we aim to empower and motivate children so they know they have the ability to change the world. The school's science provision is recognised by the achievement of the nationally recognised 'Primary Science Quality Mark', which the school currently holds at bronze level.