



Brookfield Primary School Policies – Science Policy



Record of Policy Amendment / History

[illegible]



Science Policy

Intent and Ambition

At Brookfield Primary School, our aim is to provide a Science education to all of our students which broadens their understanding of the world around them and challenges them to enquire and ask these big questions during their time at Primary School and beyond. A subject focus on vocabulary helps students to acquire the language needed in order to broaden their understanding and think more deeply about the subject and make links across the curriculum such as Maths, Design & Technology as well as subjects which might challenge understanding such as RE and RSHE. Science is a prominent subject across the school. To support the 2 curriculum hours dedicated to the subject each week, our learning environment continues to evolve to include working walls in every classroom.

Our school celebrates British Science Week each year with a hands-on approach and whole school theme which parents are encouraged to join us for.

As a school, we embed the aims of the National Curriculum to ensure that all pupils:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Implementation

At Brookfield Primary School, we recognise the significance that developing and recalling vocabulary can have on our learning. Vocabulary is used and displayed in Science teaching in order to help children make connections between the topics they are learning and previous skills they have learned. This is shared in classrooms across the school on vocabulary pyramids. Vocabulary is introduced and assessed at the start of each unit, revisited and developed continually through teaching, and assessed again at the end of each unit. Working Scientifically vocabulary is displayed all-year-round.

In order to support a whole-school approach to the delivery of the Science Curriculum, Science learning includes:

- 2 hours of curriculum time dedicated to the delivery of Science – This is structured as one afternoon or divided into 2 1-hour sessions at the discretion of the class teacher.
- Science is taught in planned and arranged topic blocks across the year, with opportunities for cross curricular links within topics where possible such as links to class texts in English, STEM opportunities in D&T and representing data in Maths.
- Existing knowledge and vocabulary is checked at the beginning of each topic using self-assessment activities.
- Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout the children's school career.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding.
- Children are assessed for fluency, vocabulary knowledge and scientific reasoning at the end of each unit (in most cases, this is half-termly)



Working walls are visible in all classrooms from YR to Y6 and must include:

- A clear subject title
- A unit title of the unit currently being taught
- Vocabulary displayed on progression pyramids
- The 5 types of scientific enquiry which should be referenced in teaching.
- Working Scientifically vocabulary specific to the year group (outlined in the progression of vocabulary document.)
- Learning prompts, books, resources to support the current Science unit.
- Working Scientifically statements relevant to the year group.

Impact

A consistent approach to the high-quality teaching of Science at Brookfield Primary School results in an engaging, exciting curriculum which promotes the natural curiosity that all children have and helps them to ask the big questions about the world. First-hand experiences in a broad range of contexts as well as clear progression means that children are fully aware of how new skills build on the extensive knowledge that they already know and means they successfully make connections across their learning. Through school visits, celebrating British Science week and interactions within school, children recognise the impact that Science has on shaping the world around them.

Assessment

Children will be assessed throughout a unit using AFL strategies with a summative assessment recorded on 'otrack' at the end of each unit. Specific unit vocabulary will be RAG-rated (red, yellow, green) both at the beginning and the end of each unit to show how understanding has been developed alongside scientific skills used. Parents are informed annually, through a student report, of their child's effort and attainment grades.