

Millbrook Community Primary School Science Policy

Our philosophy is that each child at Millbrook Community Primary School will become a competent scientific thinker and investigator, who will encounter awe and wonder through first-hand scientific investigative experiences and approaches. An emphasis on providing the children with a high-quality Science Curriculum will offer the foundations for understanding the world around them through the specific disciplines of Biology, Chemistry and Physics.

Curriculum design at Millbrook promotes development of knowledge, enquiry methods and working scientifically based skills. Continuity and Progressions is achieved through careful planning of knowledge, vocabulary and skills. It is our purpose to enable children to develop the intellectual and practical skills which will allow them to explore and investigate the world of science and develop a fuller understanding of scientific phenomena.

The whole school environment will reflect the importance of science. All staff will champion science and our primary aim is to make sure that every child has a positive experience throughout their education at Millbrook.

Intent

The intent of the Science curriculum is to stimulate and develop our pupils' curiosity in the subject, whilst preparing them for life in an increasingly scientific and technological world. We believe that Science encompasses the acquisition of knowledge, concepts, skills and positive attitudes.

The study of Science within our school enables children to investigate the wider world and how it works. A high-quality science education provides the foundations for understanding this world through the specific disciplines of Biology, Chemistry and Physics. It also enables children to develop inquisitive minds, whilst exploring a variety of ideas about themselves and concepts and theories around them.

Throughout the programmes of study, the children will acquire and develop the key substantive knowledge that has been identified within each unit and across each year group, as well as the application of scientific. We ensure that the Working Scientifically skills are built-on and developed throughout children's time at school. Pupils are immersed in scientific vocabulary, which is progressed and developed each across the topics and year groups.

Learning is enriched through dedicated Enrichment Events/ Days held throughout the year as well as making the most of additional opportunities of specialist visitors and visits. Parents will be provided with updates on Science in the school.

Implementation

- Each class in both Key Stage 1 and Key Stage 2 will provide children a weekly science lesson, which will be at least 2 hours in duration.
- Creative learning pathways are planned for, so that children can make links to prior learning and develop depth in key skills and knowledge within Science
- Curriculum Maps ensure coverage of the National Curriculum
- Vocabulary Progression is mapped for each class and year group to promote confidence in Scientific voice
- Promoting enjoyment and enthusiasm for learning is paramount
- Planning ensures real, first -hand and rich science experiences so that all children explore, question, predict, plan, carry out and make observations and conclusions about their scientific tests
- Developing an understanding of the importance of Science in everyday life
- Formative Assessment is completed through probing questions, marking of books, and listening to their use of scientific vocabulary

- Summative Assessment is implemented through a Retrieval Placemat at the end of each topic in Foundation and Key Stage 1 and 2
- Carefully planned Subject Leader monitoring will provide useful feedback and feedforward to staff
- High quality displays will promote curiosity and reinforce learning

Impact

At Millbrook Community Primary School, through our rich and broad curriculum we are enabling children to gain the knowledge, skills and understanding they need for the world around them and their future. The Curriculum Map ensures children will progressively build on prior knowledge and understanding and support them in producing outcomes of the highest quality.

A shared understanding of how to promote children's "Development of Attitudes" in science provides practical examples of how this can be achieved. Qualities such as: resilience, readiness, resourcefulness and being reflective will result in independent learners, with a thirst for challenge and depth of understanding of scientific skills and concepts.

The outcomes of Subject Leader monitoring will ensure science is always based on high quality learning and teaching. The Subject Leader will report regularly to SLT and Governors.

Written by: Jonathan Arnold. Science Subject Leader. September 2023.

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