



NEW MILLS PRIMARY SCHOOL

Science Programme of Study

At New Mills Primary School, we understand the importance of developing our pupils as scientists and immersing the children in a creative, diverse and inclusive Science curriculum. We expect our Science curriculum to sustain our pupils' natural curiosity so that they are eager to learn the subject content as well as develop the necessary investigative skills. Our enquiry based curriculum will help foster a life-long interest in Science.

National Curriculum

The National Curriculum for Science aims 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.

National Curriculum link [To view the National Curriculum click here:](#)

Intent

At New Mills Primary School, our curriculum is developed to provide a meaningful and coherent Science education based on progression and sequencing of knowledge and skills across the school. It has been designed to equip pupils with secure subject knowledge, as well as develop their confidence to question the world around them, explore possible answers independently and communicate their ideas effectively using specialist vocabulary. Our curriculum will enable children to become enquiry based learners who are encouraged to collaborate through researching, investigating and evaluating experiences.

Implementation

To ensure high standards of teaching and learning in Science, we implement a curriculum that is progressive throughout all key stages.

Teachers use Curriculum Maestro to ensure the delivery, sequences and coverage of lessons. It requires deep thinking and encourages children to work using questions, considering different avenues for further research. They do this through exploring, discussing, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They draw simple conclusions and use scientific language to talk and write about what they have found out.

Working scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching.

Impact

Children enjoy and are enthusiastic about Science.

- Children are becoming increasingly independent in Science, and are completing pupil-led investigations.
- Outdoor learning opportunities are provided. Our school pond and woodland area are important habitats that children can explore and value as part of the wider ecosystems.
- Through enrichment days, and additional learning opportunities during 'science week', we promote the profile of Science and allow time for the children to explore scientific topics further.

Assessment at New Mills Primary is teacher based and formed using a variety of strategies (use of questions, reflection tasks/presentations/quizzes). A written assessment/quiz at the end of each unit allows for misconceptions and gaps to be addressed more immediately, rather than building on insecure scientific foundations.

We ensure that children at our school are equipped with scientific skills and knowledge that will enable them to be ready for the curriculum at Key Stage 3 and for life as an adult in the wider world. By the end of Key Stage 2, pupils will have a thorough understanding of scientific vocabulary, knowledge, skills concepts and enquiry based learning appropriate to their year group.

The impact will be reviewed in the form of book scrutiny, pupil voice, learning walks and assessment information.