

Science at Rossmere Academy

Intent

Our intent for Science at Rossmere is to ensure that all pupils:

- Are immersed in exciting, stimulating and enriching Science lessons.
- Develop scientific knowledge, conceptual understanding and vocabulary through specific disciplines of biology, chemistry and physics.
- Develop an understanding of the nature, processes and methods of science through a range of scientific enquiry, which build on their natural **curiosity** and that enable them to answer scientific questions about the world around them.
- Are equipped with the scientific knowledge required to understand how science has already changed their lives and how it may shape future success.
- Are **inspired** to explore the scientific world beyond Rossmere, including jobs within the world of science and will learn about a **diverse** range of significant scientists.

Implementation

The implementation of Science at Rossmere:

Through the delivery of the Science curriculum, children are taught the essential skills to ensure they can investigate problems, understand how science works and discover why science matters in the world. Science is taught weekly from Early Years to Year 6. Teachers create a positive scientific learning environment within their classrooms, through effective planning and teaching.

Planning

- Science is taught in planned topic blocks.
- Science Curriculum coverage document ensures that all aspects of science are taught and that there is clear progression in science.
- Teachers will plan stimulating and challenging science lessons that ensure progression across the topic.
- Thoughtful planning ensures that there are opportunities for problem solving, scientific enquiry and for children to apply their scientific knowledge, skills and research to find answers.
- Children are exposed to the world of science beyond Rossmere Academy, which aims to inspire them as scientists. They are exposed to the world of scientific occupations and the nature of different roles.

Teaching

- Teachers use precise questioning to deepen conceptual knowledge and skills.
- 'Working scientifically' is taught within each science topic, either as a separate strand or embedded into the lessons.

Extra-Curricular

- Children are offered a wide range of extra-curricular activities, educational visits and visitors, which compliments and broadens their science curriculum.

- Regular events such as Science Week, Earth Day, International Space Week, strive to raise the profile of Science at Rossmere, as well as provide a broader provision and further acquisition and application of knowledge and skills.

Impact

The impact of Science at Rossmere:

Children's progress is continually monitored and is used to inform future teaching and learning. By the end of each Key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study as set out in the National Curriculum. When observing children at work, individually, in pairs, in a group, and in classes, they will demonstrate their ability to use and understand a range of scientific vocabulary. They will ask questions and use their own ideas to try to find the answers, representing their findings in an appropriate manner depending on their year group. Questioning, talking and listening to children, work sampling and learning walks will allow the Subject Leader to assess impact of the teaching and learning that has taken place.