Maulden Lower School



Science: Intent, Implementation & Impact

Curriculum Intent

In their science lessons, the children will:

- begin to understand the world through the specific disciplines of biology, chemistry and physics
- develop a sense of excitement and curiosity about natural phenomena
- be encouraged to understand how science can be used to explain what is occurring through different types of science enquiries that help them to answer scientific questions about the world around them

When children leave the school, they will be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Curriculum Implementation

We provide an inclusive science curriculum that encourages our children to understand, explore and question the natural and humanly constructed world around them. Science is a core subject and weekly lessons are taught as part of our creative curriculum.

Our curriculum covers Biology, Chemistry and Physics as well as Working Scientifically which develops the children's practical skills in science enquiry. The topics covered are revisited and built upon as the children move through the school to ensure progression for all.

Teachers begin each unit of work with a formative assessment of what the children already know so that gaps in learning can be addressed and children can associate prior learning with their growing knowledge and skills.

The study of well-known British and global scientists is developed over time and contributes to the children's understanding of British Values and their SMSC (Spiritual, Moral, Social and Cultural) development.

Curriculum Impact

The successful approach at Maulden Lower School results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. Children will retain knowledge that is pertinent to science with a real-life context. They will be able to

question ideas and reflect on knowledge. We nurture curiosity, creativity, imagination and a growth mindset within pupils which has benefits across the school curriculum. Children apply PSHE learning objectives whilst working collaboratively and practically to investigate and experiment. They are encouraged to take risks, experiment and incorporate Oracy skills to explain the process they have taken and be able to reason scientifically. Our engagement with our school environment will ensure that children will learn through varied and first-hand experiences of the world around them. Children will learn the possibilities for careers in science as a result of our community links and connection with other agencies. Children will develop an appreciation and understanding of how Science- based issues may affect their own lives and the future of our world.

We measure the impact of our Science Curriculum through:

- formative teacher assessment of pupils' achievement
- summative assessment at the end of each unit of work
- pupil surveys and pupil voice activities
- parent surveys
- lesson observations
- monitoring pupils' work
- curriculum reviews
- behaviour and attendance
- interest in extra-curricular activities