

Science Intent.

At Locks Heath Junior School, our science vision is to develop the fundamental knowledge and understanding the world around us through biology, chemistry and physics. We strive to create a sense of excitement and curiosity through practical and engaging activities and enquiries. The teaching of science is vital for the future of our children to ensure that they develop the ability to explain, predict and analyse the events occurring in the world around them and have a positive impact on the world around them as they learn and grow.

To achieve this our curriculum aims to:

- Ignite pupils' **curiosity** and encourage them to confidently explore and discover the world around them through the teaching of key skills and concept led exploration linked specifically to the National Curriculum objectives.
- Offer practical, hands on and exciting experiences that encourage enquiry skills and develop pupils' **imagininations** to ask and answer questions.
- Provide opportunities to inspire children to be **independent** learners.
- Interweave science throughout the curriculum to ensure that it is purposeful.
- Ensure that children have a clear understanding of the substantive knowledge and disciplinary skills in order to be successful scientists.
- Offer stimulating and challenging experiences to help children secure and extend their scientific knowledge and vocabulary.
- Ensure that knowledge is developed and built upon throughout their time in the junior school to be able to understand scientific concepts in more detail.
- Embed working scientifically skills (disciplinary skills) in lessons to ensure these skills are being developed progressively throughout the children's school career
- Remove barriers for children to ensure that they can access and develop both the substantive and disciplinary knowledge for the unit.
- Ensure the safeguarding of all pupils by delivery key safeguarding messages throughout each science unit: from health and safety during practical tasks to raising awareness of drug safety and healthy lifestyles.
- Support children to collaborate and work co-operatively with their peers through effective **teamwork** in order to encourage them to modify their ideas and take risks.
- Actively encourage the use of reading across the subject using key texts linked to each unit.
- When possible, drawing on skilful local families to enhance children's science cultural capital and engagement.

“A scientist is not a person who gives the right answers. They are one that asks the right questions.” - Claude Levi-Strauss

“It is important to view knowledge as sort of a semantic tree – make sure you understand the fundamental principles, i.e. the trunk and big branches, before you get into the leaves/details or there is nothing for them to hang on to.” – Elon Musk