

## Science at St John's

## Intent

At St. John's, it is our intention to provide a high quality science education that provides children with the foundation they need to recognise the importance of science in every aspect of daily life. We will ensure that all children are exposed to high quality teaching and learning experiences which will stimulate their interest, enabling them to develop a sense of excitement and curiosity about natural phenomena. We will encourage all children to ask questions about the world around them and work scientifically to further their conceptual understanding and scientific knowledge. We want children to be curious and for that curiosity to be backed by secure knowledge and the skills needed to investigate and answer questions.

## Our Science Curriculum

We use the LPDS (Lancashire) framework to support EYFS curriculum planning and Plan Assessment, (for years 1-6) which supports the National Curriculum, to inform our bespoke unit plans. These plans ensure progression in knowledge, vocabulary and skills through the specific disciplines of biology, chemistry and physics. We believe that a child's understanding in science is achieved by repeated exposure to key concepts over time, securing previous learning and deepening knowledge by application and extension. Children visit key topics such as 'Animals, including humans' across different years, each time adding to what they know and deepening understanding. A curriculum must be coherent across all phases of education so that learning builds on what students already know. Only then will knowledge become 'sticky' and stay with children forever. In order to ensure this, our teachers know exactly what has been taught previously and will provide opportunities to revisit this knowledge and then build upon it with exciting new learning.

Our rationale is to help children to understand what they are learning, why they are learning it now, what it builds upon and where it will lead. As they move through the curriculum, students will be increasingly encouraged to develop their curiosity, learn how to work scientifically and appreciate the value of science in their everyday lives, which in turn will foster respect for living organisms and for the physical environment. Our curriculum will enable children to become enquiry based learners, collaborating through observing over time, investigating, identifying and classifying, pattern seeking and researching. This scientific enquiry will integrate substantive and disciplinary knowledge into an overall strategy to answer questions about the material world.

## Enrichment.

Throughout our Science curriculum, we provide enrichment opportunities to enhance children's knowledge and skills. These opportunities include after school clubs such as 'Mad Science', trips and visits within the local area to study the environment and exciting experiments and competitions throughout the school during 'Science Week'. We also acknowledge and celebrate important scientists through cross-curricular links.