St. Luke's Science Intent Statement 2023-25

Our Intent

At St Luke's, we aim to provide our pupils with a Science curriculum that meets and extends beyond the National curriculum but more importantly one that focuses on skills and knowledge acquisitions and highlights real life experiences. We endeavour to foster a love and curiosity of Science in all stages at St Lukes.

Using fun, practical lessons, we plan to develop their awareness of the influences of science in everyday life grounded in scientific knowledge and conceptual understanding.

As part of a whole school approach, we aspire to guide our pupils to develop wider skills relating to Science and STEM subjects, including co-operation, teamwork, problem solving and independent working. With our eco community at school, we also strive as a school to develop a caring attitude towards the environment, living things and to encourage an appreciation for the world we live in.

Our Implementation

Scientific skills and science as a subject is firstly taught discreetly. Once pupils have the necessary knowledge, teachers plan carefully sequenced lessons that weave together pupils' knowledge and skills to give opportunities to apply their new learning in new contexts.

Our inter-connected curriculum gives pupils autonomy to use their learning in different ways, allowing pupils to retrieve what they know and providing opportunities to deliberately practise their skills in authentic ways.

Well sequenced lessons make learning purposeful, providing opportunities for children to explore their curiosity, think critically and collaborate together.

Teachers lead dialogic classrooms, using a range of strategies including “Mantle of the Expert” and a bespoke STEAM approach with pupils in ‘role’. This approach supports the environment in being language rich as pupils are encouraged to use these technical words throughout their writing and linking topics.

Our Science lessons follow exploratory questions which are designed to challenge our curious minds. Pupils are made aware of the strands of science and skills that the topic/lessons are aimed to teach. This allows pupils to understand that science covers a lot of disciplines that might not be discernibly clear.

Pupils are taught to experience scientific skills, apply these skills in their investigations and reason the theories behind these topics. Throughout this process, pupils are encouraged to work in teams but also to learn to take ownership of their learning to make predictions, solve challenges and explain scientific phenomena using an inquiry-based approach to working scientifically and applying their learning to contexts that link with both their experiences within and outside of school.

Through our Spiral curriculum pupils are given the opportunity to revisit scientific skills and knowledge so they are embedded and become part of a bank of skills and knowledge on basic scientific skills that they can draw on and refer to when needed.

Our school environment supports pupils' curiosity and allows them to independently experiment scientifically through play and explorations especially in early years and further down the school.

Impact

Our pupils at St. Luke’s have and continue to be curious about the world around them. Our pupils enjoy curiosity projects at home which is celebrated at school and becomes the basis of their learning. These hooks leave a long lasting impact on concepts that they are able to engage with.

Our interconnecting curriculum allows pupils to have access to a range of activities and have positive, successful experiences that empowers them and creates a sense of wonder and curiosity for the world with which they interact.

Our pupils learn the possibilities for careers in science, as a result of our enrichment programmes and workshops especially with our community links and science fairs.

Our pupils work scientifically and imagine themselves as real life scientists, they enjoy the subject which results in motivated learners with sturdy scientific understanding. As such, pupils from St Lukes are prepared for the next step in their life and academic journey.

Enrichment

Scientific workshops

Hooks and Museum trips

Steam club and curiosity projects

Science fair

Career fair