Science Intent Statement

As a welcoming and inclusive family school we will embrace all members of our community. St. Stephen's will strive to foster an enriched love of learning embodied in the Word of Christ by celebrating and nurturing a child's full potential, for we believe that ***Jesus Christ is the Light of the World. The light shines in the darkness and the darkness has not overcome it. (John 1:5)***

Mission Statement: St. Stephen's is rooted in Christian faith and committed to excellence: encouraging staff to excel, pupils to flourish, and all to feel secure, valued and loved.

Intent

At Astley St Stephen's CE Primary School, we recognise the importance and value of Science in everyday life. We aim to give our children the opportunities to develop a strong understanding of the world around them whilst also evoking elements of curiosity and excitement. As one of the core subjects taught at primary level, we give the teaching and learning of science the prominence it deserves. Our skills-based approach to Science helps to ensure that all children develop specific skills to think critically and that all children are inquisitive throughout their time at St Stephen's and beyond. We aim for all to gain an understanding of scientific processes which will prompt their understanding of the vast implications of Science, today and for the future.

Each year group has the scientific skills, knowledge and topic areas mapped out in accordance with the National Curriculum expectations and Understanding the World in the Early Years Foundation Stage. Our broad and engaging curriculum aims to foster a sense of wonder and awe about the world, and our focus on skills of enquiry allows staff to ensure that the children at St Stephens not only deepen their scientific knowledge, but also acquire these skills and an appreciation of Science. This is ensured through practical experiences, conducting experiments and through the use of appropriate equipment both within a team and independently.

We endeavour to ensure that the Science curriculum we provide will give children the confidence and motivation to continue to further develop their skills into the next stage of their education and life experiences.

Implementation

Teachers at St Stephen's take control of their own Science planning which is underpinned by the Pzaz scheme. Planning is also motivated by the scientific skills map, the knowledge learning journeys and topic cover sheets. Teachers create a positive attitude towards Science, eliciting a sense of excitement and wonder with the aim of reinforcing this attitude, as well as the expectation that all children are capable of achieving high standards in Science. This element of excitement is encouraged through our hands-on approach to Science which is underpinned by Pzaz practical lessons and activities.

We ensure that each engaging lesson taught is driven by at least one of the skills of enquiry areas, which are suggested on the topic cover sheets for each year group. These underpinning skills can be dated on each pupils working scientifically skills sheet which is in their books. This helps to see when each skill is met or explored within a lesson.

Prior knowledge and learning is discussed with the children at the beginning of each topic, and at the end of each topic the children are made aware of where their learning will take them next. This is all outlined on the topic cover sheets, helping to ensure that the children are aware of their own learning journey, how they are building upon their prior knowledge and encourages them to reflect on how far they have come. As the children's knowledge and understanding develops, they become more proficient in independently selecting and using scientific equipment, obtaining and interpreting results whilst becoming increasingly confident in their growing ability to come to conclusions.

Pupils are encouraged to become inquisitive and ask questions about their learning and scientific experiences. At St Stephens, we recognise the value of our children finding out the answers to their own questions themselves. This may be through practical, first-hand experiences or through conducting their own research. Engaging lessons are created with each lesson having both practical and knowledge elements. Teachers are encouraged to use precise questioning in class to assess conceptual knowledge and skills and children are regularly formatively assessed to identify those children with gaps in learning, so that all children keep up. This element of questioning also allows teachers to address any misconceptions as and when they arise.

Impact

The successful approach at Astley St Stephen's results in a fun, engaging, high-quality science education, that provides children with the foundations for understanding the natural world. Our Science curriculum not only demonstrates, but celebrates progression of scientific skills and knowledge. Through thorough engagement with the curriculum on offer, children at St Stephens can be expected to make good progress throughout their time, strengthening not only their conceptual and scientific knowledge, but also their love and enthusiasm for Science and all that it offers. Pupil voice is used to further develop the Science curriculum, through questioning of pupil's views and attitudes to Science to support the children's enjoyment of science and to motivate learners.

Through our stimulating, inspiring and challenging learning environment, we aim for all children to remember and be inspired by their experiences of Science, and to continue to be inspired beyond their St Stephens journey.

In Christ: Be healthy, Be happy, Be helpful, Believe.