Science statement

"Science is magic that works." – Kurt Vonnegut

Intent

Science plays a crucial role in our understanding of the world around us. At St Ives, our science teaching helps to prepare children for life, through experiences and exploration of the world in which they live.

We aim to provide a broad and balanced science curriculum that:

- builds pupils' scientific knowledge and understanding of key concepts within the fields of biology, chemistry and physics
- develops pupils' skills to think scientifically through making observations, questioning, predicting how things will behave, explaining what is occurring and analysing causes.
- immerses pupils in a rich and varied specialist vocabulary to enhance their knowledge and understanding of the subject
- encourages a sense of excitement and curiosity about natural phenomena and scientific processes
- enhances pupils' ability to work collaboratively and independently
- meets the needs of all our pupils, enabling them to reach their full potential
- makes meaningful links with other subjects and pupil's own life experiences to further enhance scientific knowledge and understanding

Implementation

Our setting sail curriculum for science, fulfils the aims as set out in the Primary National Curriculum 2014 and the EYFS statutory framework. It is progressive throughout our school and equips pupils with the knowledge and skills necessary to continue enjoying science and making progress throughout KS2.

In the Early Years science learning in embedded in, but not limited to, the area of 'understanding the world'. Pupils in the Early Years work towards achieving the Early Learning Goals though a range of planned activities linked to specific topics across the year and teachers also build upon pupils' science learning as opportunities arise . Topics are chosen carefully to engage and inspire pupils by making links to their own interests and experiences. Science teaching is delivered through a range of child initiated and adult initiated activities, carried out in both the indoor and outdoor learning environment.

In Key Stage One, science is planned as a unit of work per term and is taught consistently once a week. Teachers work collaboratively to plan each unit and set out the weekly learning objectives to ensure knowledge is built upon over time. Where possible, the teaching of science is linked to topic work but is also taught in discrete units when appropriate.

At the beginning of each lesson teachers make links to prior learning which ensures previous knowledge can be revisited and retained. A range of teaching strategies and methods are used to engage pupils and provide them with high quality science lessons. Pupils have the

opportunity to use a variety of resources and take part in regular practical experimentation; allowing them to develop their knowledge, understanding and skills.

Teacher assessments in science are carried out as part of everyday classroom activity and it is a continuous process. These assessments are then used to inform planning, address misconceptions and close gaps.

Staff meetings are used effectively to provide training and support the development of subject specific knowledge so teachers have the confidence and skills to provide high quality science lessons.

Impact

Pupils will leave St Ives Infant and Nursery school as passionate and confident scientists who have been inspired to continue their science learning into Key stage 2 and beyond. At the end of Year 2 pupils will have required the appropriate age related knowledge and developed the relevant scientific skills that will enable them to make good progress and have a positive impact on their everyday lives.

Pupils will have a rich vocabulary which will enable them to articulate their thoughts and understanding of taught concepts. They will work confidently as scientists, questioning ideas, reflecting on knowledge and reasoning scientifically as well as having the ability to work collaboratively or independently when experimenting and investigating in science lessons.