

Science  
Intent Implementation Impact Statement

**Intent**

We recognise the importance of science and scientific enquiry. We aim to develop a fun, practical and engaging high quality curriculum that inspires the children to be aware and engage in the world around them.

At the heart of our science curriculum is a thematic approach which encourages scientific investigation and the acquisition of knowledge. Where possible we deliver opportunities for the children to investigate and explore using varied scientific approaches, leading to them being equipped for life to ask and answer scientific questions about their immediate environment and the world around them.

We aim to ensure that 'Working Scientifically' skills are an integral part of our science lessons, set to meet the needs of the individual child and are developed throughout the children's time at school. We aim to develop individual children's skills so that they can apply their knowledge of science when using equipment, conducting experiments and investigations, building arguments and explaining concepts, being familiar with scientific terminology and most importantly, to develop the ability to ask questions and be curious about their surroundings.

**Implementation**

The acquisition of key scientific knowledge is an integral part of our curriculum.

In Early years and KS1 the pupils learning is child centred and follows the child's interests and individual Educational Health Care Plan (EHCP). Although the focus is on communication and a language rich environment, they offer a topic based multi-sensory approach, taken from the International Early Years Curriculum (IEYC) which enables children to explore and develop 'Understanding of the World' in EYFS and more subject focused learning in KS1. These are the initial building blocks to develop their scientific skills, knowledge and vocabulary. Children in Reception are assessed in relation to their progress towards the Cherry Garden Branch Maps on Tapestry in EYFS and move on to IASEND in year 1.

In Key Stage 2 their scientific skills are developed through the 'International Primary Curriculum' (IPC) which covers the aims of the National curriculum and fosters a curiosity and interest in the sciences and their environment. This enables the children to understand and apply their scientific learning and the development of vocabulary contained in each unit.

The progression of skills for working scientifically are developed by key stage but also based and differentiated on the developmental levels of the individual pupils. We create a positive attitude to science learning within their thematic units and reinforce an expectation that children can achieve high standards in science. Our whole school teaching and learning of science involves the following: -

- Science areas will be taught in planned and arranged thematic blocks (in a two-year cycle for KS1, LKS2 and UKS2.) Class teachers plan for all children to be catered for through differentiated planning suited to their abilities.
- The units also include problem solving and real-life opportunities, to help children explore for themselves, research and discover answers. Where necessary these skills are modelled or scaffolded by adults to help children develop their skills.

- *The IPC medium term planning has been adapted by teachers to consider the needs of our children and is differentiated to meet the needs of individual classes. It delivers practical and engaging lessons with questioning in class to test conceptual knowledge and skills and assesses the children using 'IASEND' regularly, to identify gaps in learning.*
- *The IPC curriculum is progressive and builds up on previous learning and skill development. The initial 'Entry point activities' help highlight any misconceptions that teachers can address. The word aware which is shared with parents also helps develop the children's vocabulary.*

### *Impact*

*The thematic approach using the IPC units ensures that science combined with other foundation subjects is made relevant to meet the needs of our children.*

*Learning for the children is fun and engaging with relevant science education and provides them with the cross curricular skills to explore and question the world around them.*

*Assessment of science will be ongoing using the IASEND assessment criteria. This will help identify any gaps in children's learning and will show the progress they have made.*