

Surfleet Primary School

Science Subject Intent

Science teaching at Surfleet Primary School aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically and understand scientific processes. Our enquiry-based science curriculum enables children to think like and truly become scientists. For us, it is crucial to develop the natural curiosity of our children as well as encourage respect for living organisms and the environment that we live in.

At the heart of our ambitious curriculum is scientific investigation. Scientific enquiry skills are embedded throughout each topic the children study and these topics are revisited and developed. Topics, such as 'Plants', are taught in Key Stage 1 and studied again in further detail in Key Stage 2. This allows children to build upon their prior learning and embed this procedural knowledge into the long-term memory.

Wherever possible, lessons are delivered practically and allow pupils to ask and answer questions to make sense of the world around them. Through the acquisition of substantive and disciplinary knowledge, pupils will become confident in connecting experiences to knowledge and develop a thorough understanding of science at work around and within them.

Through a range of first-hand experiences, investigations and observations pupils can work as Physicists, Biologists and Chemists, understanding the skills that are transferable between the different roles, but also their role discretely. Science is taught in discrete units, that are carefully planned across the whole school to provide the coverage and prior knowledge needed in order for a thorough understanding. It is recorded in a designated Science book for each pupil. Across all areas of Science, the key skills of comparing, exploring, identifying, describing, classifying, questioning, observing, testing, recording and researching are modelled by teachers and embedded as we develop independent learners.

Fundamental Knowledge and Skills within the EYFS

In the early years, pupils at Surfleet Primary School begin to work as scientists by exploring the phenomena of the world around them. In the early years, our children question, predict, observe and discuss their observations of the world around them, therefore igniting their curiosity for further investigation.

Observation, exploration and discussion of the natural world underpins further learning about the seasons in Key Stage One and the key changes that take place within each one. Use of the outdoor area for learning allows pupils to independently identify plants and animals in the natural world around them and also begin to ask further questions about what they experience. This is also done alongside helping them to develop a natural curiosity and ability for working as a scientist through exploration.

Exploration using their senses is of fundamental importance at this stage as they identify parts of their bodies and how it helps them to know about the world around them. Planned opportunities introduce children to the vocabulary needed throughout school to begin to explain their observations and opportunities are planned for them to talk about keeping themselves healthy, which provides the foundation for further learning throughout school when working as biologists to explore the human body and how it can be kept fit and healthy.