



# A voyage of discovery – we are sailing to success together...Science

<b>I N T E N T</b>	<p>It is our intention to develop our children's <b>love for learning</b> through the Science curriculum. We want to give our children the <b>scientific knowledge and skills</b> they need to be successful scientists. We develop creative learners with imaginations that are ignited through <b>exploration and curiosity</b> within our 'hands-on' and engaging science curriculum. We aspire for our children to perceive themselves as <b>future scientists</b>, to have ambition with no limitations. Our study of real-life scientists ensures that our children have a diverse range of positive role models to aspire to, and a purpose for their learning. Children from all cultures, genders and ethnicities are able to see themselves represented as scientists.</p> <p><b>Right from the Early Years Foundation Stage</b> our children will study the world in which we live, developing an understanding of nature and processes. The Early Years Foundation Stage is the foundation of knowledge and skills building. Throughout their time here, they study seasonal changes, our environment, materials, animals, plants, and humans, enabling them to develop an understanding of the world in which they live and how all of these associate and connect with one another. Essentially, they will begin to understand how our world works. We will nurture their own wellbeing, ensuring they feel valued with an understanding of their role as <b>responsible global citizens</b>, protecting the environment in which they live. We will nurture our children's <b>enquiring minds and develop their skills in asking and answering scientific questions</b> through investigative approaches.</p>
<b>I M P L E M E N T A T I O N</b>	<p><b>APPROACH:</b> Holistic, physical – well-being, healthy lifestyle, intellectual, personal, social, emotional, spiritual, moral and cultural</p> <p>In line with our agreed principles of Quality First Teaching (QFT), science is delivered using the following QFT bullet point headings. In science, learning may look like:</p> <p><b>Review:</b> all science lessons begin with recall of prior knowledge and vocabulary.</p> <p><b>Vocabulary:</b> Teaching correct scientific vocabulary and the children applying this vocabulary within lessons to demonstrate their knowledge and understanding.</p> <p><b>Small steps:</b> children are encouraged to ask 'why?' and draw on their experiences of the world around them to solve problems and reflect.</p> <p><b>Questioning:</b> excellent teacher questioning, practical activities and intervention in play- based exploration at EYFS, enables the children to respond to their own questions, observing and discussing similarities and differences in the world around them; to draw conclusions based on their own observations..</p> <p><b>Modelling:</b> adults teach the correct vocabulary and model it within context to support the children applying it when learning.</p> <p><b>Guided practice with scaffolding:</b> scaffolding can ensure that all children can access learning and record their scientific ideas</p> <p><b>Checking understanding:</b> in science this might be the adult asking a child to explain their observations using correct scientific vocabulary.</p> <p><b>Adaptive and inclusive:</b> adaptations are made within all lessons to ensure all children can access the knowledge and skills being taught and deepen that knowledge for future learning.</p> <p><b>Purpose:</b> science learning comes from the EYFS and National Curriculum and may be linked to our Topic. Cross curricular links are made between science and other STEM subjects- Maths and Design Technology.</p> <p><b>High expectations and achievable goals:</b> Whilst knowledge is important we are aware that we are growing the scientists of the future, preparing our children to question, investigate and analyse a world we know nothing about.</p> <p><b>Independence and choice &amp; Collaboration and co-operation:</b> this may be seen through children being reflective, resourceful and resilient in their scientific thinking and learning; choosing at times how to present their work. Our science curriculum provides children with a range of first hand engaging and stimulating experiences where they can work together and share ideas and experiences.</p> <p><b>Feedback and response, praise and encouragement:</b> Throughout science lessons adults respond to and explore children's ideas, encouraging the use of a rich scientific vocabulary</p>
<b>I M P A C T</b>	<p style="text-align: center;"><b>CHILDREN MAKE EXPECTED OR GREATER THAN EXPECTED PROGRESS</b></p> <p>Children at Trafalgar Community Infant School speak in a positive way about their science learning. Through exciting, engaging and inspiring learning opportunities children develop knowledge and skills in the field of science. Children perceive themselves as scientists and are confident to investigate, observe and analyse the world in which they live. By the end of Year Two, they are well equipped with the skills to question, problem solve, challenge and inquire with independence.</p>