




Science Curriculum

Motto: Learning, Achieving, Aspiring Together.

Intent, Implementation and Impact



Intent	Implementation	Impact
 <p>The Science Curriculum at Lake Farm Park Academy aims to provide a high quality foundation on which the children begin to develop an understanding of the world around them whilst acquiring the essential aspects of the knowledge, methods, processes, implications and uses of science, today and for the future.</p> <p>We aim to develop our children's scientific enquiry and investigative skills through the exposure and exploration of our rich outdoor environment and locality especially Lake Farm Park and the Rural Activities Garden Centre. We encourage our children to understand how science can be used to explain phenomena, predict how things will behave, and analyse causes.</p>	<p>Teachers use a variety of teaching and learning styles in Science lessons. Our principal aim is to develop the children's knowledge, skills and understanding. We do this through a mixture of practical, observation and recording activities.</p> <p>Lake Farm Park also has close links with Royal Holloway University who provide Science activities for the children in KS2. Undergraduates from the University's School of Biological Sciences Department work closely with our children helping them to learn about and make homes for wildlife in our school grounds. Regular events, such as Science Week or project days, such as Earth day, allow all pupils to come off timetable, to provide broader provision, acquisition and application of knowledge and skills. Some of these events will involve families and the wider community.</p> <p>Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage.</p> <p>Our Science planning is topic based as part of our cross curricular approach. The National Curriculum is used as a basis with specific guidance provided by Snap Science, an online teaching resource.</p> <p>All Science units include:</p> <ul style="list-style-type: none"> • A knowledge organiser which outlines knowledge (including vocabulary) all children must master. • A KWL, glossary and an initial assessment. • A main driver question to be assessed at the end of the unit. • Sequence of lessons with mini driver questions to support children in answering the main driver question. • Evidence in books written or pictures • Where possible include a wide range of extra-curricular activities such as trips (RAGC, Science Museum, Lake Farm Country Park etc.) workshops and visits from experts who will enhance the learning experience; • End of unit assessment <p>All units follow a progression line where applicable across the three main science disciplines of biology, chemistry and physics. New topics are taught starting with the basic definitions to ensure that the children understand what they are learning about</p> <p>In addition to this, our Mr. Mac Gregor garden and plants in the playgrounds provides the children with opportunities to plant and observe their crops grow. Our Science Ambassadors play an important part in raising the standards of science at the school.</p>	<p>The successful implementation will result in a fun, engaging, high-quality science education, that will provide children with the foundations and knowledge for understanding the world. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Frequent, continuous and progressive learning outside the classroom is embedded throughout the science curriculum. Through various workshops, trips and interactions with experts, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. Children learn the possibilities for careers in science, as a result of our community links and connection with national agencies such as the STEM association and Royal Holloway University.</p> <p>The impact and measure of this is to ensure children not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.</p>