



Woodfield Primary School

Science Rationale

Intent	<p>At Woodfield, our science curriculum helps us to create a sense of 'Awe and Wonder' and 'Excitement and Curiosity about Natural Phenomena'. Science, as a core subject, should often be independent from topics to ensure that a depth of knowledge and understanding of key concepts can be learnt. All children will have the opportunity to find out and explore the world around them discovering, explaining and developing skills of enquiry through working scientifically. We ensure that all pupils can see themselves reflected in the science curriculum, by highlighting present-day role models and the contributions of scientists from a wide range of backgrounds; and considering social and cultural values around scientific ideas. It is our vision to distil a lifelong love of science within our pupils.</p>
Implementation	<p>In the EYFS, practical activities, stories and our outside spaces are used to inspire a curiosity in pupils about the world around them. Through child led play, pupils explore schemas which help them to understand their environment and develop their inquisitive nature.</p> <p>In KS1 and KS2, the National Curriculum is set as the minimum expectation. Science is taught in 6-lesson units, two a term. The curriculum is sequenced so that meaningful links are made between subjects, and the order of units allows these connections to be made. The curriculum is met through the use of the key enquiry skills (identifying and classifying, pattern seeking, research, observation, and fair testing). This is taught to the children through DR IPROF whereby consistent images and terminology are used throughout Key Stage 1 and 2. Content is always carefully situated within existing schemas. Every unit considers the prior knowledge that is prerequisite for that unit and builds on that knowledge to develop a deeper understanding of that concept. Through Year 1 to Year 6 the children follow a progression of data handling skills to ensure that a range are taught and used. The curriculum is adapted and extended to ensure that the curriculum meets the needs of all pupils, with a variety of assessment techniques being used to ensure that core knowledge is remembered and retrieved. Oracy skills are incorporated into each lesson, ensuring that all children develop an inquisitive mind where they ask questions and use and embed specific scientific vocabulary.</p>
Impact	<p>Children enjoy and are enthusiastic about science in our school. They develop a variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/ investigative skills. They acquire a broad scientific vocabulary which enable them to articulate their understanding of taught concepts. The children are equipped with the knowledge required to appreciate and understand science's contribution to all aspects of everyday life and they develop aspirations, which will see them through to further study and work.</p> <p>The assessment process enables teachers to review taught knowledge ensuring that children have the greatest opportunities to remember more. Through questioning, teachers check understanding so they can fill gaps and address misconceptions as required. Assessments are recorded for every unit to ensure that targeted support can be provided for children through scaffolded tasks to ensure that all children can achieve.</p>