



Science at Healdswood

Intent

Our science curriculum ensures learning is exciting, challenging and meets all children's needs. The learning exposes children to the importance of science in society and how it relates to everyday life. It encourages children to ask questions about the world and gives them the opportunity to find out in ways they may not have imagined before. We strongly believe that our children are entitled to a broad and balanced curriculum and we provide this through both scientific knowledge and skills. These come through the 'scientific enquiry' strands that are then built upon each year, in order for them to become more independent, competent scientists. Our aim is for our children to become Scientists who are equipped with both the knowledge and skills to explore the world and to understand the implications and uses of science today, and for the future.

Implementation

At Healdswood, Science is taught weekly for one hour in KS1 and work is shown in books and via photos, which are divided into learning units taken from the National Curriculum and shaped to suit our children's needs. Lessons may include direct teaching, practical experiments, observations, research and children asking questions about the world. There is a strong emphasis on working scientifically through the specific disciplines of biology, physics and chemistry. We use adaptive teaching, to ensure an inclusive approach with all learners accessing the subject. Planning is completed by the curriculum lead and adapted where necessary by the class teachers to suit their cohorts. Quality planning ensures the coverage of objectives and ensures clear progression of knowledge through school. Planning includes knowledge and skills which will be taught as well as key vocabulary and a sequence of learning. Risk assessments for science are completed for certain activities to ensure the safety of the children within the lessons when using specific scientific equipment or taking care of certain animals. For Early Years Foundation Stage, scientific knowledge comes under 'The World' element of the EYFS Framework. Science is planned and delivered via opportunities to explore the natural world and work scientifically within the continuous provision, linking to the different learning units throughout the year alongside some mini taught, adult directed activities. EYFS sets the strong foundations for scientific learning as they get ready to progress to the National Curriculum in KS1.

Assessment

At the end of each science unit, children are assessed through quizzes to assess the scientific knowledge learned. Children are also assessed during the lessons, through assessment for learning, knowledge checks and scientific work – this forms a benchmark judgement. Gaps identified are addressed via flashbacks at the start of every lesson to embed and consolidate knowledge to ultimately retain it in the long term memory. Assessment is monitored by the subject lead. At the end of the year, the teacher records progress and attainment in Science on children's reports. This is to inform the next teacher and also parents and careers.

Impact

As a school, we intend to develop and stimulate our children's natural curiosity and excitement about understanding natural phenomena and finding out about why things happen in the way they do. Through the teaching of Science, we want to equip our children with the scientific knowledge and conceptual understanding required to understand the uses and implications of science and begin to appreciate how it will affect their future. We intend for children to meet the expectations of the science curriculum and that key knowledge transfers into their long term memory, paving the way for children to become well rounded individuals ready to lead their best lives.