



Science Curriculum Statement



“Science is not about finding the right answer; it’s about asking the right questions.” An Wang

At Vallis First School, we are passionate about providing all our children with an engaging Science curriculum, so they develop enquiring minds, as well as a deep and lasting interest in the world around them. Through the teaching of science, we also aim to foster concern about, and active care for, our environment.

Intent

Our intent is to give every child a broad and balanced science curriculum which enables them to confidently explore and discover what is around them, so that they have a deeper understanding of the world we live in. We aim to develop children’s enthusiasm and interest in science and a sense of excitement and curiosity about natural phenomena by providing exciting, practical hands-on experiences that encourage curiosity and questioning, whilst developing their scientific language and vocabulary.

As a scientist leaving Vallis First School, every child will:

- Have experienced a wide range of inspiring, science-based engagement and enrichment activities. This includes visits to explore the local area and welcoming visitors into school.
- Approach science tasks confidently and will have developed secure scientific substantive and disciplinary knowledge which they can build on in middle school education.
- Be enquiry-based learner who can discuss, ask questions and explain their thinking using scientific language.
- See themselves as scientists and understand, and be inspired by the fact, that science is ever-changing and to recognise the importance of science in every aspect of their daily lives.
- Have respect for living things and the physical environment.

Implementation

At Vallis First School we have developed a progression of substantive and disciplinary skills for each year group, which enables pupils to build on and develop their skills each year. Each child in KS1 and 2 is taught a weekly science lesson by their class teacher for about an hour. Science at Vallis is taught as science topics throughout the year, so that children can achieve depth in their learning. In Key stages 1 and 2 these are blocked over a two-year rolling programme. Consideration has been given to ensure progression across topics throughout each year group across the school as well as coverage of the National Curriculum.

At the beginning of each topic, children are given interactive activities to show and record what they know already. This informs future planning to ensure that lessons are relevant and take account of children’s different starting points. Science lessons are planned with year group colleagues, but these plans are carefully adapted by class teachers to ensure that children working at greater depth will be challenged, as well as learners who need support to fully engage and demonstrate their science knowledge and skills progression.

In order to meet our aims above and the requirements set out in the Early Years Foundation Stage framework and the Primary National Curriculum, we will implement the following:

- Science tasks are well planned and resourced and support all learners to ensure that all children access our curriculum. Opportunities to make links with other areas of the curriculum, such as Mathematics and Design Technology are optimised.

- Children spend time outdoors. Opportunities are planned to use the school grounds and the local environment to encourage children to ask questions about the world around them and to apply their science skills in meaningful contexts.
- Much of the Science curriculum is taught through hands-on experiences. Children will often work collaboratively and children are actively encouraged to discuss what they observe, to ask questions and talk about what they have learnt.
- Children will have memorable experiences. Science mornings and interactive assemblies are planned to give all children opportunities to experience the 'wow' factor of science to enrich their learning. Visitors are often invited into school to inspire children to use their science skills in future professions and support building high aspirations for our children at Vallis.

Impact

We desire to support all children at Vallis to develop a keen interest in science and enthusiasm for learning about the world around them. Regular use of our 'Fantastic Four' lesson quizzes and our quiz boxes to rehearse and revise our 'sticky knowledge' ensures that substantive knowledge is regularly reviewed.

Subject monitoring by the Science subject lead assesses children's attitudes to science learning and recall of 'sticky knowledge'. We also use pupil voice to explore our curriculum and its impact from the children's perspectives. Outcomes in Science books evidence a broad and balanced science curriculum and demonstrate children's acquisition of identified key knowledge. Additionally, children are given the opportunity to demonstrate their knowledge by recording what they have learnt at the end of each unit of work. As children progress throughout the school, they develop a deep knowledge, understanding an appreciation of science in their everyday lives.

The impact of Science teaching at Vallis is seen in a number of ways:

- Children love science and talk enthusiastically about their learning and progress in science.
- Children can talk about their science knowledge and understanding of science concepts using rich scientific language.
- Children will retain knowledge that is pertinent to science in a real-life context.
- Children will make good progress and are expected to leave Vallis reaching at least age-related expectations in Science.
- Children will be able to ask questions and confidently work collaboratively and practically to investigate and experiment.
- Children will be well-prepared for the next stage in their educational journey.

Curriculum Lead: Tracey Messenger

Subject Lead: Ali Plumridge