

Science Vision Statement

At Alexandra Park Primary School we provide our children with a high-quality science education that should engage and inspire them alongside reflecting our core values of Care, Aspire and Achieve. It will provide pupils with a curiosity and fascination about the world around them and it will equip them with the knowledge and skills to create a better future for themselves and their world.

Care

The science curriculum is carefully planned to engage and challenge all of our children, to encourage them to build on prior knowledge whilst demonstrating care for our planet and the world around them. Our topics, such as habitats, electricity, plants and animals give us the opportunity to discuss how we can care for our planet and live more sustainably.

Aspire

As a subject that lends itself naturally to visits (or the invitation of visitors into school), our children experience a rich variety of aspirational opportunities as they progress through school.

In addition to these externally provided opportunities, we plan and deliver a range of positive and practical lessons that engage and support children's science learning, all taking place in our science lab.

Achieve

Our science curriculum ensures that children achieve a balance of knowledge and skills in each topic of work. Knowledge is built upon from previous learning from previous years and from previous lessons.

Regular opportunities are given for low-stakes knowledge retrieval in the form of quizzes; children are given every chance of success in order to maximise motivation.

Teachers ensure that children are supported through scaffolding and challenge ensuring that all pupils can achieve in every lesson.

Intent

Through science at Alexandra Park Primary, we aim for all children to foster a curiosity about the world around them whilst acquiring specific skills and knowledge to help them think and work scientifically. Through our teaching and learning, our children will gain an understanding of scientific processes and start to make connections within science as well as with other areas of the curriculum.

It is important for children to have an understanding of how science has changed our lives and how it is vital for our future prosperity and sustainability.

Alongside teaching our children skills and knowledge we are also developing the following types of scientific enquiry: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources.

<p>Implementation</p>	<p>At Alexandra Park, we aim to make our science teaching as engaging and practical as possible. We implement the science curriculum that is progressive throughout the school covering the key strands of The National Curriculum. Science is taught as part of a termly topic, focusing on scientific knowledge and working scientifically skills stated in the National Curriculum ensuring that knowledge builds progressively and that children develop skills systematically. Connections between subjects are made to reinforce learning where appropriate. Lessons are planned to reflect upon previous learning and to make connections between new and existing learning.</p> <p>Science teaching focuses on enabling children to think and work like a scientist. A variety of teaching approaches are used and lessons are planned to include opportunities for children to work practically and use models as much as possible to support children’s understanding of scientific concepts. They will have the opportunity to work in pairs, in groups and to work independently. Within our Science teaching we include ‘The Seven Steps’ to support children to develop key knowledge and vocabulary. (Movement, Games, Creativity, Ownership, Challenge, Meaning, Celebration). New information and knowledge is introduced in small steps.</p> <p>Our termly topics are a combination of children learning and understanding a variety of scientific concepts and working scientifically to develop children’s skills in observing, pattern seeking, sorting, classifying and grouping, researching and setting up and completing comparative and fair tests.</p> <p>We encourage adults and children to use both rich language and precise vocabulary linked to the subject area that they are studying so that they can understand it and can then use it to reason, articulate and make generalisations. To ensure that the children get the best support in lessons, children have access to various resources to help them find out more.</p>
<p>Impact</p>	<p>Evidence through pupil voice, COLAs, end of unit assessments and outcomes in books will show that children can articulate and demonstrate their scientific knowledge and understanding using the correct vocabulary. Children will be able to discuss how they worked scientifically and how these investigations supported their learning. Children will be able to make connections from previous learning and learning from other subjects.. Children will have an understanding and respect for the world they live in and the people who live in it and how science has changed our lives and how it is vital for our future sustainability.</p>