



Curriculum Statement – Science

Our Science Curriculum

Intent

At Strawberry Fields our children are all scientists. Our broad and balanced science curriculum is designed to deliver a high-quality science education that provides children with the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. This approach enables our children to confidently explore and the discover the world around them.

Our children are curious about the rapidly changing world around them and they want to learn about how they can make a positive impact on the world's future prosperity. We believe that by having a secure foundation in scientific principles our children will leave us with the skills and knowledge needed to make meaningful and lasting contributions to wider society.

In the short term, we want our children to love science. We want our children to remember their science lessons and be excited to talk to their friends and family about what they have learnt. We want them to grow up dreaming of being astronauts or marine biologists or forensic scientists.

Teachers aim to ensure that all children are exposed to high quality teaching and learning experiences that will hook the children's interest, enabling them to develop a sense of excitement and curiosity about natural phenomena. The children are encouraged to ask questions about the world around them and are given practical hands-on experiences that encourage curiosity and questioning.

Children are encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. There are opportunities to apply mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.

Science at Strawberry Fields aims to empower the children with the knowledge needed to make informed choices about what constitutes a healthy lifestyle.

Our aim is that our curriculum helps our children to secure and extend their scientific knowledge and vocabulary, as well as promoting a love and thirst for learning.

Implementation

The makeup of classes at Strawberry Fields means that science coverage is planned over a two-year cycle.

- Each half-term, two weeks are blocked for the delivery of science in the afternoons. (2-3 sessions a week)
- Children build upon their prior learning from previous years leading to a depth of understanding and progression of skills.
- Teachers promote enjoyment and foster interest in the scientific disciplines.

- Children are given regular opportunities to explore, question, predict, plan, carry out investigations and observations as well as conclude on their findings.
- Children present their understanding and findings in a range of ways using specific scientific language and diagrams.
- Regular opportunities are embedded into the curriculum to allow opportunities to review the learning that has taken place in previous blocks.
- Each block will start with the opportunity for pupils to discuss previous learning and a chance to share what they already know.
- Each child is given a knowledge organiser at the start of each topic.
- To support teaching, teachers have access to a range of resources from the Primary Science Advisory Service (PZAZ).
- Effective use of education visits and visitors are planned, to enrich and enhance the pupil's learning experiences within the Science curriculum.
- Teachers use highly effective assessment for learning in each lesson to ensure misconceptions are highlighted and addressed.
- Through using a range of assessment tools, differentiation is facilitated by teachers, to ensure that each pupil can access the Science curriculum.
- Children are given clear success criteria in order to achieve the learning intention with differing elements of independence.

EYFS

The Early Years Foundation Stage Curriculum supports children's understanding of Science through the planning and teaching of 'Understanding the World.' Children find out about objects, materials and living things using all of their senses looking at similarities, differences, patterns and change. Both the environment and skilled practitioners foster curiosity and encourage explorative play, children are motivated to ask questions about why things happen and how things work. Our children are encouraged to use their natural environment around them to explore. Children enjoy spending time outdoors exploring mini-beasts and their habitats, observing the changing seasons, plants and animals. Children regularly participate in cookery and baking sessions which allows them to experience changes in state as ingredients are mixed, heated and cooled.

Impact

The impact of this curriculum design will lead to outstanding progress over time, across key stages, relative to a child's individual starting point and their progression of skills. Children will therefore be expected to leave Strawberry Fields reaching age related expectations for Science. Through various workshops, trips and interactions with experts our Science curriculum will lead pupils to be enthusiastic Science learners and understand that science has changed our lives and that it is vital to the world's future prosperity. We want to empower our children so they understand they have the capability to change the world. This is evidenced in a range of ways, including pupil voice, their work and their overwhelming enjoyment for science.