

Crossley Street Primary School

Science Curriculum Overview

Intent:

At Crossley Street Primary School, we meet the requirements of the National Curriculum by providing all children with a broad, balanced, engaging and practical Science programme of study, which prepares them for life beyond primary education. Science, in our school, is about developing children's ideas and ways of working that enable them to make sense of the world in which they live. We contribute towards the cultural capital for the children, in terms of the knowledge and skills they need to be successful learners and in wider life. Staff ensure that all children are exposed to high quality teaching of biology, chemistry and physics and practical, hands-on learning experiences, allowing children, where possible, to explore their outdoor environment, community and locality, therefore developing their scientific enquiry and investigative skills. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. Our teaching sequence allows children to cumulatively build knowledge and skills, as seen on the Science Long Term Plan and SNAP Science Overviews.

Implementation:

To ensure high standards of teaching and learning in Science, we implement a curriculum that ensures progression, depth and builds skills year on year throughout Key Stage 1 and 2, using the Collins SNAP Science as a basis for teaching, and adapting to suit the needs of our children. The SNAP Science units are based on The National Curriculum Programmes of Study for Science. Teachers plan, adapt and extend units to suit their children's needs, interests and current events where appropriate. Teachers have good subject knowledge and the quality of teaching is consistent across all year groups. We ensure that there are no barriers to learning, so all children including those who are disadvantaged or have SEND, achieve the intended outcomes. The clear progression of skills is identified in our year group specific Knowledge and Skills Organisers.

In Key Stage 1 and 2, Science is taught as discrete units and lessons to ensure coverage, and each year group has weekly 60 - 90 minute lessons. These lessons cover topics such as, plants, materials, living things, animals including humans, just to name a few. During the Animals, including Humans topic, lessons cover important skills and information about wellbeing and personal growth, which is one of our curriculum drivers.

EYFS use the Early Learning Goals and Development Matters documents to plan Science lessons. Space repetition is used to enable children's understanding and develop skills so they can work independently. Children play, explore and actively develop thinking skills.

Teachers are encouraged to make lessons as practical as possible, which enables children to use their initiative when investigating problems, which is one of our curriculum drivers. Practical learning is recorded through photographs, that are stuck into Science books, floor books or stored in the Seesaw App. Teachers often use 'Key Questions' at the end of a practical session, so that children can demonstrate learning. This ensures children have a clear understanding of the lessons and enables them to recall knowledge about science and how it fits with larger concepts.

Where possible, we link our lessons to scientists of the past and present, including those from a range of cultures and civilisations from around the world. They lead children to a greater understanding of different ways of life and a respect for cultures that are very different from our own, this also links to our diversity curriculum driver. The range of

scientists children are exposed to, often inspires them to study science further in later life.

Impact:

We monitor and measure the impact of our Science curriculum in several ways. As subject leader, learning walks and book scrutiny are used to assess the impact of quality first teaching. Pupil voice is also used to hear feedback from children to ensure that our curriculum continues to engage and inspire. When assessing the impact of our Science curriculum, we aim to evaluate knowledge and understanding pupils have gained against expectations. After each Science unit is completed, teachers assess children as working either towards expected standards or at expected standards. Teachers use their year group's Knowledge and Skills Organiser, as well as responses to the Big Questions, for each topic, to assess children's skills, which is then collated within the assessment trackers. It is important that children, not only acquire the appropriate age-related knowledge linked to the Science curriculum, but also skills which equip them to progress from their individual starting points. Children will have embedded the key Science Working Scientifically skills needed to allow them to further develop their learning.

By the end of their time at Crossley Street Primary School, all children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- A richer vocabulary, which will enable them to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.

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