Broadbottom C of E Primary School



Science

November 2022



'Our vision in science is to encourage curiosity in children so that they ask questions that fuel navigators, explorers and adventurers in the universe we live in.'

At Broadbottom, we encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum follows Dimensions – Learning Means the World themes, based around the National Curriculum, and fosters a healthy curiosity in children about our universe - promoting respect for the living and non-living. We are committed to providing a stimulating, engaging and challenging learning environment. Throughout our school children are encouraged to develop and use a range of working scientifically skills including:

- Processes and Changes
- Methods
- Observing and Recording
- Scientific Vocabulary
- Uses and Implications
- Cross-Curricular Links (STEM)

We promote and celebrate these skills.

We want our children to have a broad vocabulary. Scientific language is taught and built upon as topics are revisited in different year groups and across key stages. We intend to provide all children, regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum.

Implementation:

How Science is taught at Broadbottom:

To ensure high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the school. Science is taught weekly in every year group to fully expose children to the teachings of science.

Planning is a process in which the Deepening Understanding ensures that the school gives full coverage of the 2014 National Curriculum programmes of study for Science and Understanding of the World in the Early Years Foundation Stage. At the start of each topic teachers prepare knowledge organisers in order to give the children an understanding to what the new unit entails. We include the use of technology, wherever appropriate, to aid teaching and learning.

Through teacher modelling and planned questioning, we want our children to wonder about and be amazed and surprised by the world around them as we recognise that our children sometimes lack experiences. Key scientific language is modelled throughout lessons enabling our children to be familiar with and use vocabulary accurately. Teachers are also encouraged to plan in trips and visitors to enhance our children's learning experience.

Impact

At Broadbottom, as stated in our vision statement, we aspire to ensure every child's light shines. To enable children to build 'sticky knowledge', we carry out regular quizzes and recaps. The quiz questions include learnt knowledge throughout the year, not just the current unit. Attainment is tracked through Track Zone against National Curriculum expectations and Working Scientifically skills.

The 2014 national curriculum for science aims to ensure that all pupils:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Children are equipped with the scientific skills required to understand the uses and implications of science, today and for the future. We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this