Subject on a Page: SCIENCE

We aim to…

develop an interest in Science and to develop their understanding of the world
ensure children who demonstrate the skills required to be a Scientist
deliver an investigative based curriculum where children are encouraged to ask questions and search for answers
provide children with real life scenarios where they are required to use their knowledge of the world around them to solve problems as faced by Scientists
develop an enquiry-based approach to Science by ensuring the children are encouraged to find answers to their questions through first-hand experiences, creating depth in their subject knowledge
support all children in accessing high-quality Science teaching, while challenging diversity stereotypes both in and outside the classroom
foster a love of learning where children develop their passion for Science
widen children's scientific vocabulary

How do we achieve our aims?

Scientific Concepts

Science at Brackenhill Primary is taught through thematic units, covering the contents of the National Curriculum. Science is taught through a combination of subject knowledge, scientific skills, enquiry and practical investigations. We believe that learning in Science develops though the experience and development of scientific concepts in incremental steps in each phase. The science curriculum at Brackenhill is structured to enable children to build on their learning in a spiral model, encouraging the development of concepts as they visit each area of science over time.

Planning

Science is taught with knowledge at its core. Through carefully planned units, pupils know more and remember more. Science knowledge is important for children to be able to explain what they have learnt from the Scientific process. This process includes questioning, experimenting, collecting data, looking for patterns in results and drawing conclusions.

Working Scientifically

Practical work is used purposefully in line with curricular goals. Practical work is a vital element of school science as hands-on learning experiences are key to the development of skills and the tying together of practical and theory. Good quality practical work engages pupils with the processes of scientific enquiry and also communicates the awe and wonder of the subject. A wide range of resources are available to enrich practical activities.

Vocabulary

Vocabulary is one of the threads which runs through every curriculum area and is key to academic success. In order to explain a Science investigation or describe observations, pupils need to have a bank of Scientific words. Vocabulary is carefully planned to feed through from EYFS to Year 6, ensuring children develop Scientific literacy. Previous years' vocabulary, based on the topic taught, will be revisited alongside introducing and embedding new vocabulary. Children should know the meanings and pronunciation of words and use them in their writing as well as verbal explanations. All classrooms should have a vocabulary display for pupils to use when they are predicting, experimenting, investigating, discussing and evaluating.

Assessment

Assessment of children's learning takes the form of ongoing monitoring of children's understanding, knowledge and skills using key questioning built into the lessons. Children will be able to apply their Science knowledge to other areas of their learning. Kahoot Quizzes are used for the purposes of assessment, as well as checking retention and recall. Time Machine also enables teachers to recap prior learning and pick up on any learnt misconceptions.

How will we know we have achieved our aims?

Pupils are engaged in their learning and share a passion for Science.
Pupils are confident in the use of key vocabulary in a range of contexts and are ambitious in achieving age-related expectations.
Pupils know more and remember more, demonstrating good progress from their starting points.
Pupils have the ability to explain their own Scientific thinking and understand that Science is constantly developing and improving, impacting our daily lives.
Pupils feel they are all Scientists and capable of achieving high aspirations in the field of Science. They understand that Science has changes our lives and is vital to the world's prosperity.
Pupils can recognise & appreciate the diversity of Scientists in Britain and around the world.