

**IMPACT:**

Children at Sutton Benger CE Primary School enjoy ‘Being Scientists’ and flourish within our curriculum. They are able to use their curiosity and their knowledge to make meaning of the world around them through a deep understanding of scientific concepts and phenomena. They are able to make connections and think critically about their existing science learning so that they can apply this to new learning.

Our curriculum allows for excellent progress over time and children are exposed to a wide range of units that build cumulatively. Children are able to confidently share, discuss, analyse and write as Scientists

Our curriculum allows children to develop their science knowledge of physics, biology and chemistry. This means they gain a deeper understanding of the world around them and are building the foundations for further learning in these areas as they move on to the next stage of their education.

**IMPLEMENTATION:**

Science **is blocked as units of learning within a 39-weeks curriculum map**. The children take on the **state of being of ‘Being a Scientist’** and are **fully immersed in a curriculum unit** that is dedicated to science, with pre-existing knowledge from other curriculum areas used to support where possible. **Knowledge Organisers** are provided for every science unit and they include the foundational knowledge needed first in order to access next learning. Subject specific knowledge is also included which allows pupils to then apply when thinking critically within the unit. The implementation of science in this way supports children to become fully secure in each science unit as well as supports them to **build progressive understanding of the key concepts that are woven** throughout the curriculum. To support high quality planning and assessment, teachers draw upon knowledge from the school’s science subject leader, as well as from experts within our multi-academy trust, DBAT.

To ensure a **cumulatively sufficient curriculum, key concepts are woven throughout**. Our curriculum is designed to ensure that all children access the key concepts within a range of units as they progress throughout the school e.g. many systems operate in cycles (seasons, water cycles, life cycles – including plants and animals etc.) and are challenged to meet learning expectations for their key stage. Key concepts are referred to throughout the curriculum units so that children are given opportunities to recall and retrieve knowledge in order to support them to build upon it.

Our curriculum is **vocabulary-rich**, both in terms of common, technical and extensive specialist vocabulary. All scientific vocabulary which is key to the unit is included as part of the **Knowledge Organiser** and is referred to throughout the unit. Children are given opportunities to **develop and practice their vocabulary and oracy** so that they become confident, articulate scientists who are able to apply their findings to descriptions and explanations about the world around them.

At Sutton Benger CE Primary School, children are taught a balance of scientific knowledge and practical skills. They work scientifically and make links with other areas of learning in subjects such as Design & Technology, Maths, Forest Schools and Computing. Through working scientifically, children are encouraged to: make observations over time; seek patterns; identify, classify and group; make predictions, carry out comparative and controlled investigations; and research using secondary sources.

**Sutton Benger CE Primary School - Science**

**INTENT:**

At Sutton Benger CE Primary School, we recognise the importance of science in our daily lives. We aim to instil a love of science and we want our children to be curious and to ask questions to develop their understanding of science in the world around them. Our science curriculum **is deliberately knowledge and vocabulary-rich** as we believe it is vital to acquire a **cumulatively sufficient understanding** of scientific concepts and phenomena. We also recognise and value the need to develop practical scientific enquiry skills and so our children are **fully immersed in units of learning** that allow them to **learn, grow and flourish** within the science curriculum.

In conjunction with the aims of the National Curriculum, our science curriculum offers opportunities for children to:

* 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 scientific enquiry that help them to answer scientific questions about the world around them;
* Be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future;
* Develop the essential scientific enquiry skills to deepen their scientific knowledge;
* Use a range of methods to communicate their scientific information and present it in a systematic, scientific manner, including the use of technology, diagrams, graphs and charts;
* Develop respect for the materials and equipment they handle, thinking about their own, and other children’s safety;
* Develop an enthusiasm and enjoyment of scientific learning and discovery.