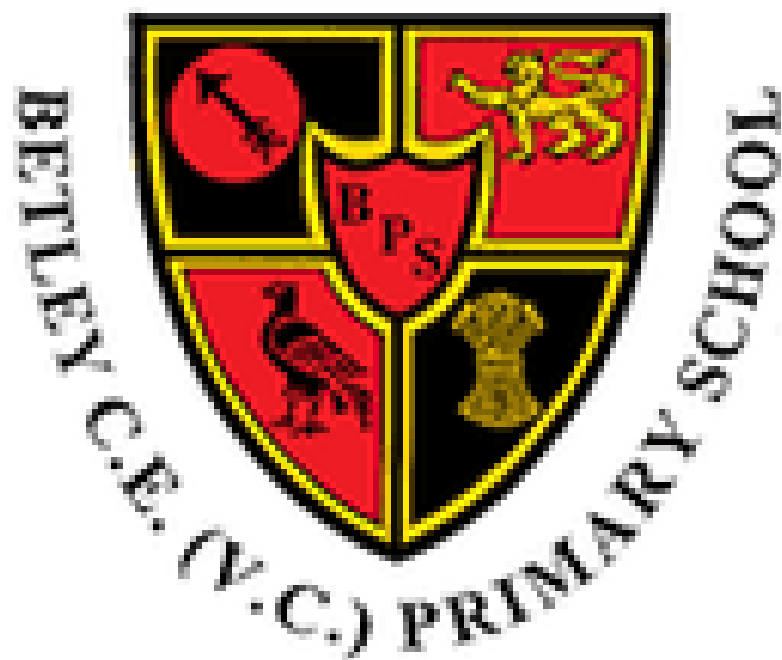


Betley CE (VC) Primary School
'Science Statement of
Intent.'



Intent

The 2014 National Curriculum for Science aims to ensure that all children:

- 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
- 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

At Betley Primary School, we recognise the importance of Science in every aspect of daily life. We give the teaching and learning of Science the prominence it requires as one of the core subjects taught in Primary Schools.

As an area of learning, Science is concerned with increasing all (including SEND) pupils' knowledge and understanding of our world, and with developing skills associated with Science as a process of enquiry. It will develop the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence.

We ensure that the Working Scientifically skills are developed and extended throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and confidently explaining scientific concepts.

Implementation

Betley Primary uses the White Rose Science scheme to provide a structured and coherent programme of learning that builds progressively through each year.

White Rose Science provides engaging lesson content in the same progressive, step-by-step method as the White Rose Maths scheme, which has proved very successful here.

Practical experiences of working scientifically are integral to the White Rose scheme. We aim to inspire and excite children with such activities so that they view scientific learning positively.

When following the White Rose Scheme, Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following;

- Through our planning, we involve problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom. Teachers use precise questioning in class to test conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning, so that all children keep up.
- We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the scheme of learning.

- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding.
- Children are offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class.
- Regular events, such as Science Week or project days, such as Nature Day, allow all pupils to come off timetable, to provide broader provision and the acquisition and application of knowledge and skills.

Impact

The successful approach at Betley CE Primary School results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them.

Through various demonstrations, lessons, workshops, trips and interactions with experts, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity.

From this exposure to a range of different scientists from various backgrounds, all children feel they are scientists and capable of achieving.

Children at Betley CE Primary School overwhelmingly enjoy science and this results in motivated learners with sound scientific understanding.