

Science

Central Walker Church of England Primary School

At Central Walker Primary School, Science is one of our high profile core subjects on which we place a great emphasis. Our vision is to inspire children's natural curiosity through investigations which allow for collaborative learning and mind-blowing fun! Science helps them to think, make decisions, ask questions, solve problems and take responsibility, and they will acquire these skills by following the programs of study in the National Curriculum.

Intention

- In our **Early Years Foundation Stage**, we aim to:
 - Develop curiosity about what children observe in the natural environment and themselves
 - Develop ability to find differences, similarities, patterns and change in the world around them and themselves
- In **Key Stage 1 and Key Stage 2**, children study the National Curriculum for Science we aim to:
 - Provide the foundations for understanding the world through specific disciplines (Biology, Chemistry and Physics)
 - Encourage and teach children to ask questions related to their work in science.
 - Teach children to use focused exploration and investigation to acquire scientific knowledge, understanding and skills.
 - Teach children to use first-hand experience and secondary sources to obtain information.
 - Encourage children to consider the way in which science is relevant to their personal health, domestic and environmental contexts.
 - Explore and consider the ways in which living things and the environment need protection and to be treated with care and sensitivity.
 - Encourage pupils to use rational thinking to help explain a variety of phenomena
 - Develop children's excitement and curiosity of science.

Implementation

- Lessons are exciting and engaging with a focus on a specific working scientifically strand during each lesson.
- Lessons are discrete but link to the termly and half termly themes where possible
- Lessons build on prior learning and develop skills and knowledge
- Teachers present knowledge clearly and effectively model and teach skills, supported when needed by the subject leader.
- Each class hosts a working Science wall
- Opportunities to apply their mathematical knowledge in science- including collecting, presenting and analysing data
- Expose children to scientific language to use in learning accurately and precisely.
- Children explore different ways in which to experiment including: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing; and researching using secondary sources.
- Children are exposed to experts/professionals in STEM through visits and visitors to school
- Children's science capital is increased through whole school science week, family science homework and science after school clubs.
- CPD is in place to support teacher subject knowledge

Impact

- Children value the subject and are inspired and excited by it
- Children have a curiosity and fascination for Science
- Children are confident and capable at methodically working through investigations
- Children's work shows clear understanding and reasoning in experiments.

We will measure the impact of our science curriculum through the following methods:

- Outcomes in books
- Evidence of subject knowledge being taught through planning and books
- A reflection on NC standards achieved against the planned outcomes
- A celebration of learning through displays and evidence of work in Curriculum floor books
- Pupil discussions about their learning