



Science **Subject Leader Overview** **September 2023**



Vision

St Cuthbert's school aims to provide a science curriculum that enables children to confidently explore and make discoveries in order to develop a deeper understanding of the world in which we live.

Our curriculum is planned to provide lessons, which develop specific skills and knowledge to encourage children to think scientifically and gain an understanding of scientific processes. It also promotes an understanding of the uses and implications of science, today and for the future.

Scientific enquiry skills are embedded in each topic, and are re-visited and developed throughout our pupils' time at school. Topics such as 'Electricity' and 'Animals including Humans', are taught in lower KS2, and studied again, in further detail in upper KS2. This allows children to build upon their prior knowledge and increases their enthusiasm for the topic, whilst embedding procedural knowledge into the long-term memory. Specialist vocabulary for topics is introduced and progresses throughout topics and across the key stages.

Through the provision of exciting, hands on, practical experiences in a range of contexts, children are encouraged to develop and use the key elements of scientific enquiry: pattern seeking; observations over time, research, identifying and classifying and fair testing. Consistent modelling and exposure of these elements will provide children with the skills and confidence to become more independent learners in upper KS2, when they will experience opportunities to pose their own scientific questions and identify an enquiry which will best solve their questions, before planning their investigation and recording their observations.

Throughout the delivery of our science curriculum, we aim to instil within the children of St Cuthbert's school, a passion for learning about the world around us, encouraging a future generation of independent scientific thinkers. We aim to equip the children, with a bank of core skills to help build on and acquire ever evolving knowledge, and enable children to think scientifically about some of the challenges we may face in the future.

Actions taken since last Ofsted October 2019

- Long term planning completed for all year groups using National Curriculum objectives
- Long term curriculum planning mapped out to ensure progression of key skills and knowledge are built on, year on year.
- Science planned by Science Co-ordinator throughout the school to ensure consistence and progression through delivery.
- Science work scrutiny conducted to ensure:
 - Evidence of progression within a lesson and progression and application of knowledge and skills across multiple lessons.
 - Consistency of topic delivery across classes and year groups.
 - Appropriate differentiation for SEND and children working at greater depth.
 - High quality presentation and high expectations.

What has been the impact of the actions taken?

- Progression of skills long term document completed
- 2 year rolling programme of science topics ensures that key skills are being built on year on year.
- Consistency in science teaching across year groups
- High standard of presentation of work is in evidence across the school

What are the main priorities you have identified?

- Ensure that SEND children are appropriately supported in achieving national curriculum objectives.
- SC1 tasks to be recorded with a consistent format using agreed scientific vocabulary.
- Ensure teaching, learning and recording evidences key skill/knowledge progression.
- Ensure that extension opportunities are planned to provide challenge for more able pupils.
- Develop the range of science resources to enable the curriculum to be delivered effectively.

Actions required to address main priorities

- Monitor SEND books to ensure that work is scaffolded through either written prompts or by simplifying the task by preparing pre-written headings where appropriate
- CPD to introduce common recording format for science investigations and agreed vocabulary.
- Monitor progression of key skills and knowledge across the school through:
 - Lesson observations
 - Half termly book scrutiny
 - Pupil Voice
- Audit of science subject knowledge/concerns amongst staff
- Audit of available science resources