

Wenlock CE Academy

Science Curriculum Intent, Implementation and Impact

INTENT

At Wenlock, our science curriculum is designed to give every child a deep understanding of the world around them. We focus on building specific scientific skills and knowledge, encouraging children to think scientifically and understand key processes, as well as the real-world applications and implications of science—both now and in the future. Our goal is to inspire a lasting love of science, while equipping pupils with essential life skills to help them become confident, well-rounded individuals, ready for further education and beyond. Scientific enquiry skills are at the heart of every topic we teach. Each unit is revisited and built upon as children progress through the school, ensuring they continuously develop their understanding and enthusiasm. Throughout their time at Wenlock, pupils are encouraged to:

- **Use a range of scientific skills:** including observation, planning, and investigation.
- **Be scientifically curious:** asking questions and exploring the world around them.
- **Develop independence:** by seeking answers to their own scientific questions.

This approach ensures that all children make continual progress, building on prior knowledge and fostering their natural curiosity, so they leave Wenlock with both a strong foundation in science and a passion for discovery.

IMPLEMENTATION

All children benefit from a bespoke curriculum—now underpinned by the Cornerstones Maestro curriculum—that is continually tailored and embedded to meet the needs of our current pupils. Our approach ensures that teachers deliver topics specifically designed for each year group, closely aligned with the National Curriculum but also responsive to the unique needs of each cohort. Teachers adapt and supplement the curriculum as necessary, ensuring that all required units are taught before the end of the academic year to support strong progression in scientific skills and knowledge.

Knowledge Organisers are used for every unit, supporting both teachers and pupils in tracking progression and ensuring key knowledge and vocabulary is retained and built upon. Science topics are either taught as stand-alone units or embedded within the driving project for the half term, where appropriate, allowing for meaningful cross-curricular links that enhance learning.

We follow National Curriculum guidance by revisiting key scientific concepts across multiple year groups. For example, 'Electricity' is introduced in Year 4 and then explored in greater depth in Year 6, enabling children to deepen their understanding and develop more advanced knowledge over time.

Scientific enquiry is at the core of our curriculum. Every lesson incorporates a range of enquiry types, so children regularly practise and refine their investigative skills. Our approach ensures cyclical progression:

- **Years 3 and 4:** Children are introduced to and begin developing science investigation skills.

- **Years 5 and 6:** Pupils are encouraged to take greater ownership, developing their own enquiry-based expertise and deepening their scientific understanding.

By continually embedding the Cornerstones Maestro curriculum, we ensure our science provision remains dynamic, engaging, and responsive—so every child at Wenlock is empowered to become a confident, curious, and knowledgeable scientist.

IMPACT

Our approach to teaching science at Wenlock aims to deliver a fun, engaging, and high-quality science education. This gives children the solid foundations they need to understand the world, equipping them with knowledge and skills they can carry forward as they move on from primary education.

Assessment at Wenlock is teacher-led and combines both formal and informal strategies. Formal methods include periodic assessment tasks and quizzes within year groups, while informal approaches involve verbal and written outcomes, reflection tasks, and presentations. This allows us to quickly identify and address misconceptions or gaps in understanding, ensuring children develop secure scientific foundations.

Children at Wenlock will:

- Show a love for science and an interest in pursuing further study or careers in this field
- Retain science knowledge that is relevant and rooted in real-life contexts
- Confidently question ideas and reflect on their learning
- Clearly articulate their understanding of scientific concepts, using rich scientific language and reasoning
- Demonstrate strong mathematical skills in their science work, including organising, recording, and interpreting results
- Work collaboratively and practically to investigate and experiment

We assess the impact of science learning through: Pupil voice interviews, gathering children's perspectives on their science learning. We carry out deep dives to evaluate teaching and learning across the curriculum and regularly check whether children can independently answer their own science questions and make meaningful links to prior learning using scientific vocabulary.

This comprehensive approach ensures that science at Wenlock not only meets curriculum requirements, but also inspires children to become confident, curious, and capable young scientists.