



Science

Intent

At Woodside Academy, our vision is to inspire children through science by sparking curiosity, encouraging questioning, and helping them make sense of the world around them. We aim to nurture confident learners who enjoy exploring, investigating and thinking scientifically. Our curriculum is designed to ensure all pupils can achieve high standards through a rich, progressive and enquiry-based approach. In line with the 2014 National Curriculum, children develop secure knowledge across biology, chemistry and physics, while also building their understanding of the world through environmental (Eco) learning. By the end of their primary education, pupils are equipped with the knowledge, skills and curiosity to make informed decisions about the world around them and to recognise the relevance of science in everyday life and future careers. From early years to year 6, we aim to develop pupils' 'science capital' (the science-related knowledge, experiences, and influences a child has), so they can see how science connects to real-world contexts and aspirations for the future.

Implementation

Science is taught weekly across the school, beginning in the Early Years Foundation Stage where children explore and investigate through play-based learning and questioning. As pupils progress, they build on prior learning through a carefully sequenced curriculum that develops scientific knowledge and enquiry skills over time.

Our teaching is based on five key types of scientific enquiry: observing over time, identifying and classifying, pattern seeking, comparative and fair testing, and researching using secondary sources. These approaches enable pupils to work scientifically, use equipment confidently, and explain their understanding using accurate vocabulary.

Lessons are practical, hands-on and enquiry-led, with pupils encouraged to ask their own questions, work collaboratively and record their learning in a variety of ways, including mind maps, annotated diagrams, photos, investigations and research tasks.



*Excellence through
Opportunity*

We celebrate a range of scientific events throughout the school year to emphasise the importance of science. Learning is further enriched through educational visits, visitors, science clubs and whole-school events such as Science Week, and a science exhibition where each class presents their investigations to parents and peers.

Impact

As a result of our science curriculum at Woodside Academy, pupils develop a strong curiosity about the world and a secure understanding of scientific concepts across biology, chemistry and physics. They are confident in using scientific vocabulary and can explain their thinking clearly using appropriate language and evidence from investigations.

Pupils are able to apply a range of scientific enquiry skills independently, including observing, classifying, testing, researching and drawing conclusions. They approach investigations with enthusiasm, ask thoughtful questions, and show resilience when exploring and problem-solving.

Assessment is ongoing and purposeful, using pre- and post-assessment tasks alongside formative strategies such as questioning, discussion, observation and practical outcomes. Retrieval practice is embedded to support long-term understanding and address misconceptions.

From the Early Years Foundation Stage to Year 6, children demonstrate increasing science capital, understanding how science connects to real-life situations, future careers and the wider world. They leave Woodside Academy as confident, inquisitive learners who are well-prepared for the next stage of their education and able to make informed decisions about the world around them.

Science outcomes reflect strong progress over time, with pupils building on prior knowledge and retaining key concepts through retrieval and application. Engagement in science is high, and pupils speak positively about their learning experiences both inside and outside the classroom.