

Science

At OAK Trust, our Science curriculum is designed to develop curious, confident and knowledgeable learners who can make sense of the world around them. Rooted in the National Curriculum, it is carefully structured to develop both substantive scientific knowledge and the disciplinary skills needed to work scientifically. Pupils build understanding of key scientific concepts alongside the ability to investigate, question and analyse evidence.

Learning is sequenced progressively from EYFS to Key Stage 2, enabling pupils to build on prior knowledge, deepen understanding over time and develop increasing independence as young scientists. Through practical investigation, observation and discussion, pupils learn to communicate their ideas using accurate scientific vocabulary and apply their understanding in meaningful contexts.

We aim to foster curiosity, resilience and a sustained interest in science, including its role in understanding the natural world and addressing global challenges such as sustainability.

INTENT

For children to see themselves as scientists:

We aim to develop pupils' sense of identity as scientists, so they see science as something they can all succeed in. Through practical and purposeful experiences, pupils recognise that science is relevant, accessible and connected to their everyday lives.

To develop the scientific knowledge and vocabulary needed to understand the world:

Pupils develop secure scientific knowledge and use subject-specific vocabulary accurately to explain, question and discuss scientific ideas. This enables them to communicate their understanding clearly and apply their learning across different contexts.

To develop the skills to work scientifically:

Our curriculum equips pupils with the skills needed to work scientifically, including questioning, predicting, investigating, testing, observing, recording and drawing conclusions. Pupils develop their ability to think critically, evaluate evidence and build understanding through enquiry.

To explore and understand the natural world:

Pupils are encouraged to explore, observe and appreciate the natural world. Through first-hand experiences, they develop understanding of scientific processes, patterns and relationships in the physical world.

To foster curiosity about the world around them:

Curiosity is central to our Science curriculum. Pupils are encouraged to ask questions, seek answers and develop a lifelong interest in how the world works.

Pupils leave our schools as curious, knowledgeable and reflective learners who are able to engage with and make sense of the world around them.

IMPLEMENTATION

At Brookside School, Science is taught through a carefully sequenced curriculum that ensures pupils progressively develop both substantive knowledge and disciplinary skills. Learning builds on prior knowledge and vocabulary, enabling pupils to deepen understanding, make connections and develop increasing independence.

We use high-quality resources, including White Rose Science, which has achieved ASE Evaluated status from the Association for Science Education, recognising its scientific accuracy, educational quality and effective teaching approach. These resources are used to support and structure learning in line with the National Curriculum.

Pupils have regular opportunities for practical enquiry and investigation, developing their ability to question, predict, test, analyse and draw conclusions using evidence. Teachers model accurate scientific vocabulary and strong subject knowledge to support clear and confident communication.

Our school grounds and local environment are used to provide meaningful first-hand experiences, including opportunities to observe seasonal change, explore habitats and understand the relationship between science, environment and sustainability.

Sustainability is embedded throughout the curriculum, helping pupils understand the role of science in addressing environmental challenges. Dedicated sustainability units in each year group help the children to:

- Understand the current issues around sustainability and climate change.
- Identify that they have a role to play in creating a more sustainable future for themselves and others.
- Think of ways to make a positive impact on their local and wider environments.
- Have a positive and proactive mindset when it comes to making sustainable changes.

Enrichment opportunities such as educational trips, STEM visitors and workshops, as well as community links, enhance learning and support pupils in seeing science as relevant to the wider world and future STEM pathways. Close links with Manor High School, further support pupils in recognising science as a meaningful and accessible pathway for future study and careers.