



Intent

Why do we teach what we teach?

At High View Primary, our intent is to:

- Aim to provide our pupils with a high-quality science curriculum, which provides many memorable, practical learning experiences.
- Encourage pupils to think like a scientist and promote scientific enquiry, meaning children are given opportunities to build a healthy curiosity in the world around them through exploration and scientific investigation.
- Provide our pupils with a curriculum has been purposefully designed to continuously build on prior learning, while continuing to develop an understanding of our surroundings and the key role science plays in this. The science curriculum follows the aims and content set out in the National Curriculum (2014) for science, ensuring full coverage of statutory programmes of study for Key Stages 1 and 2. Where appropriate, it also draws upon guidance from the EYFS Statutory Framework to ensure high standards and effective pedagogy.
- Provide rich opportunities for cross-curricular connections, reinforcing and applying learning from science to other areas such as Maths (data and measurement) and Computing (digital research and presentation). These connections help pupils see the relevance and interdependence of knowledge, strengthening understanding across the curriculum.
- Adapt learning to meet the needs of all, including pupils with SEND and those who are disadvantaged. Teachers provide scaffolded support, alternative representations, and differentiated outcomes so all pupils can access and achieve the same ambitious curriculum intent using resources and strategies to promote equity, participation and independence.
- In the Early Years Foundation Stage (EYFS), following the statutory framework, science begins through Understanding the World - The Natural World and Past and Present. Our intent is to nurture curiosity, exploration, and a sense of awe about the natural world. We aim for children to develop the ability to observe, question, and describe changes, laying a strong foundation for scientific enquiry in Key Stage 1.

Implementation

How do we teach what we teach?

In order to offer high-quality science lessons to all pupils, we ensure:

- In KS1 and KS2, science is taught for 2 hours weekly.
- Year groups focus on a specific topic per half term and these have been carefully mapped out, in line with the National Curriculum.

- At the beginning of every lesson, children are given the opportunity to reflect on previous learning, discuss the objectives for the current lesson and to consider how this learning will help us in the future - including cross-curricular links.
- Pupils have a detailed knowledge organiser in their books, which reflects prior knowledge, new vocabulary and learning objectives. These are frequently referred to in lessons and planning. We maintain high expectations for all learners by providing appropriate scaffolding rather than simplifying content
- They are also encouraged to 'think like a scientist' and scientific vocabulary is promoted throughout the lesson. This language is then modelled during lessons by the teacher and displayed on a science working wall so it can be referred back to.
- Wherever possible, lessons are planned to offer practical, investigative opportunities for learners to explore and question.
- Teachers use assessment for learning throughout sessions to fill and address any gaps or misconceptions through learning. Quizzes are used as a tool to review learning at the start and end of each unit.
- Pupils undertake two disciplinary writing tasks twice a year, demonstrating their growing understanding and ability to apply subject knowledge through written outcomes.
- Early morning work questions are posed to the children to reflect on prior learning and prepare them for future learning.
- To support teaching and planning, teachers access a range of resources and planning ideas from White Rose Resources. Teachers are supported in delivering the science curriculum through a combination of professional development, structured planning, and subject knowledge is strengthened through ongoing CPD opportunities, collaborative planning sessions, and guidance from the Science Subject Lead.
- Pupils are provided with a success criteria for each lesson which enables them to have a clear understanding of the learning journey they will be taking.
- Through enrichment opportunities, such as 'science week', a yearly science fair and educational visits, we promote the profile of science and allow time for the children to freely explore scientific topics.
- Adaptations and scaffolding in science may include providing visual models, step-by-step guides for experiments, or stem sentences for scientific explanations, allowing all students to engage fully with specific concepts.
- In EYFS, children learn science through play, exploration, and real-world experiences. They investigate materials, living things, and the environment through hands-on activities such as planting seeds, observing weather and seasonal change, exploring habitats, and experimenting with water, light, and sound. Adults model scientific language in context and encourage children to describe what they see, think, and wonder. High-quality texts are carefully chosen to introduce and embed scientific vocabulary. These stories are revisited across the year to deepen understanding and link scientific concepts to children's everyday experiences. Opportunities for talk, questioning, and sustained shared thinking are embedded within provision both indoors and outdoors. Practitioners scaffold observation, prediction, and comparison skills, encouraging children to think critically about the world around them.

Impact

How do we know what pupils have learnt and how they have learnt it?

At High View Primary, the approach we have taken towards planning our science curriculum ensures pupils are constantly given the opportunity to thrive and enjoy learning. The impact of our science curriculum is seen in pupils who are curious, reflective, and confident in exploring the world around them. Science learning enables children to think critically, question confidently, and make sense of concepts through investigation and reasoning—skills that reflect our school values of curiosity, perseverance, respect and self-belief.

Across the school, pupils build securely on prior learning. Progress is tracked carefully, with teachers using ongoing formative assessment to identify next steps and address misconceptions swiftly. Disciplinary Writing tasks provide valuable evidence of pupils' ability to explain, reason, and communicate scientific understanding in depth. These tasks, alongside pre and end of unit quizzes, demonstrate pupils' ability to make connections between topics and apply learning in new contexts.

Subject leads monitor the quality and impact of science teaching through a range of activities, including book looks, lesson visits, pupil voice discussions, planning reviews, and assessment analysis. Pupil voice plays a central role in evaluating curriculum impact—children are able to articulate what they have learned, how they learned it, and how prior knowledge supports new understanding. Findings from monitoring activities are used to celebrate strengths, inform professional development, and ensure high standards of teaching and learning are sustained across the school.

Our pupils are able to think, write and speak like scientists - this provides them with the foundations for understanding the world that they can take with them once they complete their primary education. They develop the confidence and competence to apply scientific understanding beyond the classroom, preparing them to become informed citizens and potential future scientists who appreciate the relevance of science in everyday life.

In EYFS, children develop curiosity and confidence in exploring their environment. They can use descriptive and comparative language, recall key scientific vocabulary, and talk about cause and effect using their own experiences and story knowledge. By the end of Reception, children demonstrate an understanding of life cycles, materials, and changes in the natural world, and show respect and care for living things and their surroundings. They enter Key Stage 1 as confident observers and early scientists who are eager to investigate and ask questions

Long Term Planning

<https://docs.google.com/document/d/1GcFDSm1ScbzhihGUeITiYU85dVMVPodIRtmsaGOtDdc/edit?tab=t.0>