Policy West Park Primary School



Contents

 .	Intent	4
2	. Implementation4-	5
3	. Impact	6
4	Links with other policies	7

Intent

At West Park Primary School, we are dedicated to cultivating an enriching science education that lays the groundwork for our students to recognise the profound significance of science in their daily lives. Our mission is to *instil* in them an appreciation for how science has transformed human existence and to underscore its pivotal role in shaping the future prosperity of our world. Consequently, we are committed to imparting crucial facets of scientific knowledge, methodologies, processes, and applications through captivating investigations, harnessing, and building upon the inherent curiosity of our students.

What makes West Park different is that we adopt a Visible Learning approach and strives for children to be active, self-aware and resilient learners who reflect, question, wonder, think, connect, and are determined to be the best they can be. Through our respect agenda, we are committed to celebrating diversity and promoting inclusivity and equality of opportunity for all.

We follow National Curriculum guidelines but see the curriculum in its widest sense and have developed knowledge-rich and skills-based learning alongside all other aspects of school life inside and out of the classroom.

Our curriculum is crafted to enable students to grasp how science functions as a tool in various ways:

Uncovering and Understanding Ongoing Phenomena:

- Helping students reveal and understand ongoing natural events and occurrences.

Anticipating the Behaviour of Elements:

- Enabling students to predict how different elements or components will behave in different situations.

Analysing the Root Causes of Observed Occurrences:

 Guiding students in examining and understanding the fundamental reasons behind observed events.

Throughout their educational journey at West Park, students will participate in a diverse range of scientific enquiries. These activities are designed to foster the critical evaluation of evidence and the development of well-reasoned explanations for scientific phenomena. Importantly, these inquiries also offer opportunities for students to apply mathematical principles, ensuring a comprehensive integration of knowledge. The enquires are:

- Comparative and Fair Testing
- Identification, Classification, and Grouping
- Long-term Observations
- Pattern Seeking
- Research
- Problem Solving

The 'Working Scientifically' components outlined in the National Curriculum are seamlessly woven into our teaching approach, fostering a deep understanding of the attributes that define a successful scientist. Immersed in key scientific vocabulary, students will not only acquire scientific knowledge but will also develop the skills to apply their mathematical understanding to:

- Collecting data
- Presenting findings
- Analysing data

At West Park, we are dedicated to providing a holistic and engaging scientific education that equips our students to navigate the dynamic challenges of the future with confidence and curiosity.

In the Foundation Stage, our approach to science education aligns seamlessly with the EYFS Statutory Framework, immersing children in an engaging journey of discovery. Through a diverse array of experiences encompassing teacher-led guidance, child-initiated exploration, and continuous learning opportunities, we foster a profound understanding of the world around us. Our young learners will embark on a captivating scientific voyage, where they will:

Engage Their Senses:

Investigate a myriad of objects and materials using their senses, unlocking the wonders of touch, sight, smell, taste, and sound.

Explore Living Things and Events:

Discover, identify, and observe the distinctive features of living organisms, inanimate objects, and captivating events in the world.

Develop Critical Observation Skills:

Examine details closely, discerning similarities, differences, patterns, and the dynamic nature of change.

Cultivate Inquisitive Minds:

Encourage the habit of questioning the 'why' behind occurrences, fostering a spirit of curiosity and exploration.

Enhance Communication and Cooperation:

Develop effective communication and cooperation skills through collaborative scientific endeavors, nurturing a sense of teamwork.

Express Insights:

Facilitate the articulation of findings, sometimes recording them in various formats, empowering children to communicate their discoveries effectively.

Connect with the Environment:

Identify and explore the distinctive features of their immediate surroundings, cultivating an awareness of their local community and the natural world.

In embracing this holistic approach to early scientific education, we endeavor to instill a lifelong love for learning and curiosity, laying a solid foundation for future scientific exploration. Together, we inspire the scientists of tomorrow.

Implement

At West Park Primary School, our commitment to science education is a keystone of our curriculum. Science is not just a subject; it's a dynamic journey of exploration and discovery. To ensure a rich and engaging learning experience, we employ a thoughtful and comprehensive approach:

- Our teachers commence each science lesson by gauging students' existing knowledge, using carefully curated knowledge organisers. This strategy empowers children to establish connections with prior learning, absorb and remember important vocabulary and concepts.
- Our curriculum is a continuum of learning, building upon the foundations of previous years. Regular retrieval practice allows teachers to identify and address misconceptions, ensuring a seamless progression in knowledge and skills.
- We plan for progress! Teachers work from long term plans and use sharp assessment for learning, and assessment of learning, to develop medium- and short-term plans, with the highest priority given to live feedback in lesson which can be adapted in real time so that all pupils made progress.
- West Park is a Visible Learning school which aims for all children to be feedback seekers, and to be selfaware so that they know what they need to do in all curriculum areas to make progress; all stakeholders promote learning dispositions and create opportunities for children to develop them.
- The school promotes teaching and learning styles that lead to high levels of engagement, including adapting
 where needed e.g. for cohort profile.
- As children progress through each year, we systematically develop their skills in working scientifically. Scientific inquiry is not just a component of lessons; it is a fundamental aspect of our curriculum.
- As a designated School of Sanctury, teachers cultivate a positive attitude towards science learning, instilling the belief that every child can attain high standards in science. Our school-wide strategy revolves around adaptable planning that caters to the diverse abilities of our students through the use of SOLO taxonomy which promotes children to drive their own learning. This adjustment is particularly crucial due to a significant number of English as an Additional Language (EAL) pupils at various stages of learning English.
- In our commitment to fostering a robust science education at West Park Primary School, we have implemented the Headstart assessment, a comprehensive tool designed to inform teachers about childrens foundational science skills. While Headstart provides valuable insights into what children know, teachers emphasise the importance of teacher judgment based on observed inquiry skills. This dynamic approach ensures a holistic evaluation, allowing us to tailor our teaching strategies to each student's unique strengths and areas for growth, thereby enriching their overall science learning experience.
- A range of relevant and exciting resources are used to support and develop learning, including trips, visitors, curriculum resources and the school library. Resources are maintained and replenished to reflect curriculum requirements and to celebrate diversity in the school.
- We design lessons to encourage problem-solving and real-life exploration, nurturing the innate curiosity
 of our students. The freedom to ask questions and the opportunity to use scientific skills for discovery
 are celebrated within our classrooms.
- Working Scientifically skills are seamlessly integrated into lessons, creating a cohesive development pathway for our students.
- Practical, engaging lessons are crafted by our teachers, incorporating precise questioning to test
 conceptual knowledge and skills. Regular assessments are conducted to identify and address any learning
 gaps. Scientific equipment and working scientifically skills are not just taught; they are demonstrated,
 ensuring a thorough understanding.
- To enrich the learning experience, we leverage outdoor learning and workshops with experts. Enrichment
 days, including science week and home learning projects, provide opportunities for students to freely
 explore scientific topics. These initiatives not only promote the profile of science but also foster a sense of
 wonder and curiosity among our students.

• At West Park Primary School, our science education philosophy extends beyond the classroom, nurturing young minds to become inquisitive thinkers and lifelong learners.

Impact

By implementing the Intent, we will have achieved the aims set out in the policy. Children will leave West Park as Visible Learners, have achieved their learning goals — our school motto is 'Be the best you can be!' — and will be ready for the next stage of their education and for life in modern Britain. They will respect everyone in society as equals and will choose kind in all interactions. They will be equipped to keep themselves safe and physically and mentally healthy.

Our curriculum design will lead to outstanding progress for all pupils, regardless of their starting points. Planned learning will build on prior knowledge and understanding, and support children in attaining ambitious targets in all areas.

Impact is measured in a range of ways including: end of key stage outcomes, internal school data, attendance data, pupil voice, pupil and parent/carer questionnaire, a wide range of monitoring and external visits to school.

Links with other policies

This policy links to the following policies and procedures:

- EYFS policy
- Assessment policy, including marking and feedback
- Teaching and Learning Policy
- SEND policy
- Equality legislation