

Rationale

Our Science curriculum is designed with a forward-thinking approach that embraces the breadth of the national curriculum while remaining rooted in real-world applications. Beginning with the White Rose Science pathway, our curriculum emphasizes a small-step, multi-sensory approach that fills knowledge gaps and supports mastery through repetition and retrieval. As pupils progress, they engage in practical applications, hands-on investigations, and modern scientific contexts, with an emphasis on understanding the environment and humanity's impact on it. The curriculum aims to make science exciting and relevant, equipping pupils with essential knowledge and skills for the challenges of the 21st century.

Curriculum Phases

Our Science curriculum is structured into four progressive phases:

- **Phase 1:** Emphasis on understanding life sciences basics, physical properties, and early experimental skills, covering units on plants, rocks, forces, and skeletons.
- **Phase 2:** Builds upon the fundamentals with a focus on materials, life cycles, earth sciences, and an introduction to environmental issues like plastic pollution and global warming.
- **Phase 3:** Expands to more complex topics, including chemistry, energy, waves, and an introduction to forensic science, encouraging pupils to apply scientific methods and critical thinking.
- **Phase 4:** Prepares pupils for advanced study, covering biology, chemistry, and physics concepts that align with GCSE expectations. Topics include genetics, environmental science, chemical reactions, and physics of energy and waves.

Enrichment

Pupils participate in outdoor learning experiences, science-based trips, and hands-on projects, such as observing local ecosystems or designing experiments to test environmental impact. These experiences aim to foster a deeper connection to science and its role in understanding and preserving the natural world.



Science - Curriculum Overview

