



Science Department Curriculum Statement

Vision

Our core aim is to inspire students to nurture their natural curiosity and actively engage with the science that shapes the world around them. Through a diverse and challenging curriculum, we equip learners with a broad range of transferable skills that are valuable not only in scientific careers but across all professional fields.

We are committed to continually evaluating and evolving our curriculum to ensure that students build their knowledge in a logical and incremental way, essential for mastering complex scientific concepts. Recent refinements to our KS3 curriculum and assessment methods at both KS3 and KS4 now focus on cumulative knowledge, retrieval, and skill development. This allows us to gain a deeper understanding of each student's grasp of Science and to set precise, personalised targets for growth.

Action

In Year 7, students are introduced to the foundational principles of Biology, Chemistry, and Physics, laying the groundwork for future learning. They also begin developing the essential "vocabulary of Science," which includes the core skills that underpin scientific study through to GCSE and beyond.

From Year 8 onwards, students are taught by passionate subject specialists who bring their expertise and enthusiasm into the classroom. Practical work is seamlessly integrated into lessons thanks to extended teaching periods, creative timetabling, and a wealth of resources, ensuring all students have hands-on experience at key learning points.

We place strong emphasis on developing reading and communication skills. Students are encouraged to explore current scientific issues through journals available in the Library and online. Examination technique is taught with a focus on understanding command words, processing information thoroughly, and using subject-specific vocabulary accurately.

Our popular Session 3 activities offer enrichment and consolidation opportunities. Highlights include the Year 7 trip to Chester Zoo, which brings topics like adaptation, conservation, and habitats to life.

The Science Online Curriculum provides all classroom resources, enabling students to catch up on missed work and explore topics in greater depth.

Assessment is carefully structured through Key Assessment Points (KAPs), which monitor cumulative knowledge, retrieval and skills. These help identify students who need additional support and those who are ready for further challenge. Weekly formative assessments reinforce recall and understanding, while also identifying misconceptions for timely intervention.

Impact

Our department consistently achieves outcomes that exceed national standards in both attainment and progress. Science is one of the most popular subjects in our Sixth Form, with around 140 students studying at least one A-level in Biology, Chemistry, or Physics.

We are proud of our students' success in gaining places at prestigious universities to study Medicine, Veterinary Medicine, Dentistry, and other science-based degrees. Science is also the leading department in preparing students for Oxford and Cambridge through our personalized mentoring programme.

A highlight of the academic year is the Year 8 Science Fair, where students work in teams to design and carry out investigations, culminating in an exhibition presented to staff, parents, and invited guests. This event showcases students' teamwork, communication, and presentation skills.

Our teachers are passionate about sharing their love of Science through well-attended Session 3 activities such as KS3 Science Club, Medical Society, Lego Robotics, and STEM competitions.

Subject contact

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