

The Quality of Education – Intent, Implementation, and Impact.

Science.

Intent – what we want to achieve.

The aim of our curriculum is to cultivate success and independence, so students feel safe to express curiosity in science and explore how science relates to the real world. The curriculum is rich in knowledge and skills and accessible to all. It builds upon their understanding of science from KS2, with the curriculum split into key scientific themes, and prepares them for Post-16 Science.

To create <i>aspirational citizens</i> , our curriculum is:	To create <i>successful learners</i> our curriculum is:	To create <i>leaders and communicators</i> our curriculum:
<ul style="list-style-type: none"> ambitious and rigorous. accessible for all. made relevant and contextualised to aid in understanding the relevance of science. 	<ul style="list-style-type: none"> rich in knowledge and skills. carefully sequenced, inclusive and spiral in nature. resourced with high quality lesson planning and materials. designed to develop literacy and oracy skills. 	<ul style="list-style-type: none"> promotes effective communication. shows students the importance of teamwork and collaboration. places cultural capital, diversity and SMSC at the heart of planning.
<p>Students have opportunities to:</p> <ul style="list-style-type: none"> experience real world applications of science. learn beyond the classroom. become part of the global community. 	<p>Students have opportunities to:</p> <ul style="list-style-type: none"> express curiosity about science in the real world. regularly revisit and embed key concepts. become confident readers. 	<p>Students have opportunities to:</p> <ul style="list-style-type: none"> develop STEM skills for later life. have a voice and be heard. take part in extra-curricular initiatives/projects. E.g. Big Ideas programme.

Implementation – how we achieve it.

- Effective curriculum leadership which ensures quality first teaching delivered by subject specialists.
- Personalised adaptations so all students are supported to make progress.
- Rigorous and accessible assessments to allow for next steps to be identified.
- Well planned and sequenced lessons, designed by shared planning for consistency, with full NC coverage.
- Students who are enthusiastic to take part.
- Extra-curricular opportunities to build cultural capital, broaden horizons and develop future global citizens for example our STEM club.

Impact – how we know we have been successful.

- All students are confident learners, communicators and future citizens.
- Develop detailed knowledge and skills across the curriculum and achieve well.
- Achieve qualifications which enable them to move onto the next steps in education or employment.
- Access a wide range or rich experiences and take opportunities to develop their STEM skills, evidenced by the PD entitlement document.
- Make good progress in their studies as shown by a positive subject P8 score.

SMSC Statement.

The curriculum provides students with a sense of fascination in learning about the world around them, whilst drawing on their use of imagination and creativity. This involves group work and discussions promoting the development of social skills. There is a strong focus on developing students morally through ethical debates and reasoning tasks where they must reasonably discuss sensitive topics such as stem cells, contraception, and human impact on the environment.

Equality, Diversity and Inclusion (EDI) in the Curriculum.

The curriculum is designed to support students from all backgrounds and to encourage them to see themselves as future scientists by including examples of scientists who reflect our student body. Protected characteristics are included in a range of topics for example: religion is discussed with evolution; disability is discussed with nuclear power; sexual orientation is discussed with reproduction and IVF.

British Values in the Curriculum.

Democracy is modelled through group work where students lead activities and through debates. Rule of Law is modelled through the *upholding* of laboratory rules and discussions around real world laws such as speed limits and fishing quotas. Tolerance and respect are modelled through sharing and valuing opinions of others within topics such as evolution and healthcare. Individual liberty is modelled through choice of tasks and independent work.

Careers in the Curriculum.

- We are leaders in promoting STEM aspirations for girls.
- STEM careers links are embedded into an array of lessons so students can understand the relevance of content.
- We work meaningfully with local and national STEM employers.
- We link STEM career learning to extra-curricular opportunities.