



Highworth Warneford School

Department Curriculum Intent Statement



Curriculum Intent, Implementation and Impact Statement

Highworth Warneford School: Mathematics Department

Introduction – Overall Department Intent

At Highworth Warneford School, the Mathematics Department is committed to nurturing a deep, long-term, secure, and adaptable understanding of mathematics in all pupils, regardless of background or starting point. Our mission reflects the school values of Integrity, Challenge, and Excellence—enabling students to turn potential into performance with honesty, perseverance, and high standards.

Our intent is for every pupil to:

- Achieve fluency and clarity in the use of mathematical language, demonstrating integrity in their reasoning and accuracy in their work.
- Engage in mathematical reasoning and problem-solving with curiosity and determination, embracing the challenge of exploring conjectures and generalising results.
- Strive for excellence and independence through a mastery approach, equipping them with mathematical skills applicable across disciplines and in the wider world.

Department implementation with the HWS 5 Keys to Curriculum Success

<p>Knowledge, skills and mastery</p>	<p>At Highworth Warneford School we follow an adapted version of the OCR 5-year spiralling curriculum. We have a varied, engaging and well sequenced curriculum that provides ample opportunities for making links and retrieval. The carefully designed plan has full coverage of both the KS3 and GCSE curriculums. Units are sequenced to build upon and extend learning from one term to the next. Concepts are revisited and built upon regularly to support students' conceptual understanding and support pupils in making connections between topics. The curriculum plan is inclusive; pupils follow the same curriculum map at KS3, and roughly a similar map at KS4 with content adapted to meet the needs of the students. All pupils cover the same core topics at the same time, fostering an inclusive environment that values integrity and promotes equity. Higher tier classes will extend this content and add challenge whilst foundation classes will carry out more recall work around the topic before moving on to new concepts.</p> <p>The KS4 curriculum is designed around the principles of regular review and checking for pupil understanding whilst allowing time for independent learning, discovery and challenge. The curriculum is split into higher, intermediate and foundation pathways with core topics being taught at the same time across all pathways.</p> <p>Regular formal assessments take place, and follow up is given after each assessment point. Assessments are cumulative, testing all content learned to date, including that which may have been assessed several times previously.</p>
<p>Literacy and numeracy</p>	<p>Literacy is a vital part of mathematical development. Precise mathematical language is embedded in every lesson, encouraging pupils to explain, justify, and articulate their thinking, and in doing so, demonstrate integrity in their communication and respect for mathematical conventions.</p> <p>Numeracy is central to all mathematical learning. We promote logical thinking and encourage students to reason with clarity and confidence, laying the foundation for excellence in mathematical competence across subjects and in real-life situations.</p> <p>Literacy is promoted through tasks in which pupils are required to discuss concepts and explain or justify answers through verbal and written explanations. Key mathematical words and command words are discussed, defined and pupil understanding is assessed using low stakes quizzing. Teachers model the correct use of mathematical language and have high expectations that pupils do the same.</p>



Highworth Warneford School

Department Curriculum Intent Statement



Entitlement and engagement

Our carefully planned curriculum combined with high quality teaching, careful questioning and collaborative learning encourages pupils to engage in lessons and explore different mathematical concepts. Manipulatives and pictorial representations are used regularly in lessons to help pupils make links and boost their conceptual understanding.

Every pupil can expect a consistent curriculum that encourages self-confidence and problem-solving skills. Progress is planned and monitored through a system of assessment much of which is low stakes and encourages participation and reduces anxiety. Our curriculum is:

- ambitious and challenging for all;
- engages everyone;
- is inclusive with a variety of support mechanisms;
- pushes all to achieve; and
- links to the world beyond the classroom.

Our curriculum is enriched by maths specific opportunities such as a school trip to Bletchley Park, the UKMT Maths challenge and an organisation who visit annually to showcase thought provoking, challenging examples of Mathematics in the world. We also create opportunities for our students to be exposed to a variety of future maths pathways through links with local businesses and through an A level assembly given by a Head of Maths at a sixth form college, fostering aspirations of excellence. We have an ambition to offer pupils, of all abilities and background, in all year groups the opportunity to see maths in the real world and are developing a varied program of trips and residential to meet this ambition.

Our mastery curriculum is inclusive for all - pupils repeatedly see the models and representations throughout many units as internalisation of models takes time, but this particularly allows SEND students to connect ideas over an extended period of time. An example of this is the bar model, which is used for algebraic representation, fractional representation and within units that address multiplicative and proportional reasoning. Having a fully resourced curriculum means that teachers can spend more time getting to know and consequently plan for the SEND student's needs. In year 7 and 8 we benefit from having mathematics nurture groups which offer pupils the chance to work in small groups with specialist teachers.

Aspiration and wellbeing

A mathematics classroom is an environment in which pupils have the freedom to explore and conjecture mathematically and in which they understand that it is good to struggle as this leads to a sense of achievement and an understanding that learning never ends. Regardless of PP, SEND, anxious or shy, students are rewarded for effort and teachers actively organise their lessons to provide opportunities where students can safely make and learn from mistakes. By instilling HWS values in our pupils, we aim to give them the confidence to tackle problems that come their way and the aspiration to achieve great things. We celebrate progress and effort through merits and Head of department commendations.

Just as teachers expect the highest standards from their pupils, so too are students entitled to excellent teaching. Teachers model and expect high standards, reflecting both personal integrity and professional commitment. Teacher CPD is central to our mastery curriculum and our department meetings have a fixed feature on implementing and understanding the concepts and constructs underpinning mathematics mastery. As a team, mastery is unpicked as we take time to 'do the maths' activities with our colleagues, we discuss this to ensure a deep understanding and to develop our thinking around the dimensions of depth and mathematical problem solving. We consider how best to differentiate tasks for each lesson to provide rich opportunities for different abilities.



Highworth Warneford School Department Curriculum Intent Statement



Community, respect and enrichment

We aim for all pupils to leave Highworth Warneford with the skills and knowledge they require to be numerically literate and be mathematically prepared for their future adult world. Through building resilience, tolerance, integrity and respect during paired and class discussion of new concepts and their links to unfamiliar problems and the world outside the classroom we are confident that students have strong problem-solving skills, a positive attitude towards unfamiliar problems and the self-confidence to tackle challenges that may arise. Numerically competent pupils who have the confidence to tackle problems are more likely to succeed in other areas and will have the skills that open doors to university courses, apprenticeships and to successful careers. We strive to equip every pupil with the skills needed to be mathematically literate and ready for the adult world. Whether pursuing university, apprenticeships, or careers, our students are prepared to tackle future challenges with confidence and purpose, embodying the school value of excellence.

Curriculum Implementation

- In Year 7 – 9, maths is taught 6 to 7 times a fortnight.
- In year 10 - 11, maths is taught 8 times a fortnight.
- Classes are organised into sets from year 7 through to year 11.
- KS4 classes study either the Higher, Intermediate or Foundation course.
- Curriculum planning allows time for revision and exam preparation in Year 11.