



MATHS AT WALTON HIGH

OUR VISION FOR EFFECTIVE LEARNING

We aim to develop students who are not only functionally numerate and confident in using their mathematical skills but who are also willing to engage, think and experiment with maths. To do this, we want our teachers to develop students as learners by planning inspiring and engaging lessons which set challenging targets for students and support them in reaching those goals.

Our team

We are a team of 23 specialist maths teachers split across our two campuses. Each campus has a Leading Teacher who reports directly to our Director of Maths. The leadership is further supported by subject leaders for KS3, KS4 and KS5 at both of our campuses. We work collegiately - sharing ideas, resources and expertise with each other and with trainees, always with a sense of purpose – to continually improve the mathematics curriculum ensuring that students experience, and learning, is maximised.

OUR MATHS CURRICULUM

Key Stage 3&4

The Maths Curriculum is sequenced to build on prior learning, enable a deep understanding of the concepts taught and support the delivery of high-quality teaching and learning. Supporting resources have been designed to complement each other and link to the curriculum, providing teachers and students with a coherent journey through secondary maths.

- **Encourages depth of knowledge**
By designing the curriculum as a 5-year programme, we have ensured that suitable time is given to cover concepts in depth, providing students with a strong foundation to build upon each year.
- **Provides full curriculum coverage**
We have ensured that the Maths Curriculum provides full coverage of the KS3 national curriculum and the GCSE mathematics specification.
- **Empowers all teachers**
The curriculum is supported by a suite of resources that supports teacher planning and delivery but, most importantly, gives teachers ownership over their lesson plans. Every context is different, so we want to ensure that teachers have the flexibility to create the lessons that work best for them and their students.
- **Provides impactful assessment**
- The Maths Curriculum is supported by formative baseline and regular assessments which provide teachers with crucial insights on student progress to help inform their planning.



- **Develops fluency and problem solving**

We know that fluency is essential for giving students the secure toolkit they need to deepen their understanding. Equally, we have ensured that problem solving is a prominent feature throughout. This balance ensures that students build the confidence they need to be successful in maths.

- **Provides retrieval practice**

Through intelligently designed resources, we regularly interleave prior knowledge to give opportunities for retrieval practice. Cross-topic content and, at times, stepping back before moving forward, allows students to consolidate the knowledge they need to take them confidently through the curriculum. Constant revision of concepts through this well-structured retrieval practice ensures that the content can be taught in depth, and in a timely manner.

- **Supports all learners**

We have structured the curriculum with flexibility in mind to ensure that all students can be supported. Suggested building blocks are provided to support this journey, and the language we have used throughout is student friendly. Tiering decisions are not required until late into Year 10. This gives students and teachers the time they need to make this, sometimes complex, decision.

- **Challenges all learners**

For each unit of work, we have provided opportunities to deepen knowledge as we believe that deepening knowledge and understanding of each topic before moving on aids long term learning. Where suitable, we have also suggested areas for further teaching.

Key Stage 5

- Students wishing to study maths at A Level have the option of Core Maths, Maths or Further Maths.
- At Walton High we are continually looking for ways to broaden our curriculum; responding to the needs and interests of our students.
- Essential for many higher education courses and careers, A Level Maths proves to be one of our most popular subjects for Post-16 at Walton High; we currently have over 180 students enrolled.
- For students who enjoy maths, or want to have a numerate qualification without studying A Level Maths, we also offer Core Maths, with the number of students opting to take the subject increasing each year.
- For those who need to re-sit their GCSE maths exam, students are given sufficient time, where a bespoke scheme of learning is delivered, tailoring teaching to students' unique needs.
- We encourage all our students to become independent learners. The role our teachers play in empowering our students to become better mathematicians is integral to students' development and success in the subject.

ENRICHMENT OPPORTUNITIES

The maths team makes a major contribution to Walton High's enriched curriculum.



After school enrichments also seeks to broaden the curriculum and desired mathematical skills. Staff are encouraged to explore their passions/interests with students. Our chess club is very popular, along with our 1001 club (aimed at KS4) that looks at mathematics beyond GCSE.

After school support sessions are well attended by students who want additional support with their Maths. We enter students, from all years, into local and national competitions and have had major success in the UK Maths Challenge. We are in close liaison with our partner primary schools and are looking to forge even closer links in the future.

STUDENT AMBASSADORS

At Walton High we put students at the heart of our learning. This year we have introduced a student ambassador scheme across both campuses. We have student representatives from each year group who regularly meet to discuss students' experience in maths at Walton High. We want students to have an input into our curriculum design; to understand what excites students, what aspects of maths they enjoy most, the elements which entice students want to study maths at KS5. This helps to inform our planning for the future, as well as activities to run as enrichments or Advanced Learning Days. With students placed at the heart of what we do, students feel valued, listened to and supported.

FACILITIES TO SUPPORT OUTSTANDING LEARNING

- We have a suite of 19 spacious and well-resourced maths classrooms across Walnut Tree and Brooklands.
- There is a networked PC in each room which is connected to an interactive smart panel.
- We also enjoy regular access to the ICT rooms, and use Autograph, Geogebra as well as a variety of cross-curricular software.
- All subject areas have administrative, reprographic and data support.