



## MATHS AT WALTON HIGH

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### 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 (Head of department) who reports directly to an Assistant Principal or Vice Principals. The leadership is further supported by subject leaders for KS3, KS4 and KS5 at both of our campuses. We work collegiately across our trust of 4 secondary schools - 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 – White Rose Maths (version3)

Our Maths curriculum follows the **White Rose Maths Secondary Scheme of Learning (Version 3)**, designed to build strong foundations, deepen understanding, and ensure every student experiences a coherent and connected journey through mathematics.

- **A 5-Year Connected Programme:** The curriculum is carefully sequenced across five years, allowing concepts to be introduced in **small, manageable steps**. This approach ensures depth of understanding and gives students time to secure key knowledge before moving on.
- **Full Curriculum Coverage:** Our scheme fully covers the **KS3 National Curriculum** and the **GCSE Mathematics specification**, ensuring students are well-prepared for future study and success.
- **Empowering Teachers:** Teachers are supported with high-quality resources that align with the scheme, including **detailed unit overviews, lesson guidance, and assessment materials**. These resources provide structure while allowing flexibility for teachers to adapt lessons to their context.
- **Assessment for Progress:** Regular **formative assessments**, alongside end-of-block and end-of-term checks, help teachers identify gaps and inform planning. This ensures every student receives the support they need to progress.
- **Fluency, Reasoning, and Problem Solving:** Our curriculum balances **fluency practice** with opportunities for **reasoning and problem solving**. Students develop a secure toolkit of skills while learning to apply them in varied and challenging contexts.



- **Retrieval and Interleaving:** Prior learning is revisited regularly through **intelligent interleaving and retrieval practice**. This helps students consolidate knowledge and make connections across topics, supporting long-term retention.
- **Inclusive and Supportive:** The scheme is designed to support **all learners**, with clear progression and suggested scaffolds. Tiering decisions are delayed until Year 10, giving students time to develop confidence before choosing a pathway.
- **Challenge and Depth:** Opportunities to **deepen understanding** are embedded throughout. Extension tasks and reasoning questions encourage students to think critically and explore concepts beyond the basics.
- **Concrete–Pictorial–Abstract (CPA) Approach:** New ideas are introduced using **concrete representations**, then developed through **pictorial models**, before moving to **abstract notation**. This progression helps students build secure conceptual understanding.

## 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 big 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 L2 Additional Maths club 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 also proudly host the UKMT Maths Teams regional finals. We



are in close liaison with our partner primary schools and are looking to forge even closer links in the future.

#### **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 interactive smart panel in each room.
- We also enjoy regular access to the ICT rooms, Laptop trolleys or iPad sets, to use Autograph, GeoGebra as well as a variety of cross-curricular software.
- All subject areas have administrative, reprographic and data support.