



# CURRICULUM INTENT

## Mathematics

- **Challenge** lies at the heart of our curriculum. It goes beyond what is statutory or typical; students are encouraged to deepen their understanding of the fundamentals of their learning at every opportunity.
- Our curriculum is fully **inclusive**. All students have access to a broad range of experiences for as long as possible, regardless of prior attainment or additional needs.
- Our curriculum is **knowledge rich**, with subject curricula designed to ensure that any 'powerful' knowledge and skills that are critical to future success are regularly re-visited.
- Our curriculum is **expertly planned** and is therefore sequenced to enable students to build their knowledge and skills towards ambitious agreed end points.
- Wherever appropriate our curriculum gives students the opportunity to **personalise** their experience, thereby facilitating enjoyment and success for all.
- The importance of reading and wider **literacy** skills is a key thread that runs through our curriculum. As well as broadening students' vocabulary, all subjects will develop students' subject-specific literacy, so they can speak, read and write as, for example, a Historian, an Artist or a Physicist.
- A carefully considered and inclusive **extra-curricular** programme supports broader and deeper understanding of the taught curriculum, as well as developing the cultural capital our young people need to be global citizens.
- Students' **personal development**, including careers education, is central to our curriculum, through all subject areas, as well as PSHE lessons, tutor time, assemblies and off-timetable activities.
- Homework and summative **assessment** tasks are strategically designed to promote the concepts of regular review and spaced practice, therefore contributing to a long-term retention of knowledge and skills.

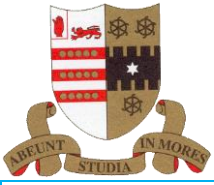
At Marling School, the mathematics curriculum is designed with a clear intent: to foster a deep understanding of mathematical concepts while nurturing a culture of challenge and reflection. Challenge lies at the heart of every lesson, as students are presented with rich tasks that encourage critical thinking, problem-solving, and creativity. Through these tasks, students develop resilience and confidence in tackling complex mathematical problems, preparing them for success both in and beyond the classroom.

In our mathematics lessons, students are provided with multiple opportunities to reflect on their learning. Reflection is a crucial aspect of the learning process, allowing students to consolidate their understanding, identify areas for improvement, and set goals for future learning. Teachers facilitate this reflection through structured activities and discussions, empowering students to take ownership of their learning journey.

The use of whiteboards is a key instructional tool in our mathematics classrooms. Teachers model problem-solving strategies and demonstrate the correct layout of mathematical solutions, providing students with clear visual guidance. Additionally, mini-whiteboards are utilised to regularly assess student learning and understanding. This real-time feedback enables teachers to identify misconceptions and adapt their instruction to meet the diverse needs of learners.

Beyond the classroom, students are encouraged to engage in a variety of extra-curricular activities to further enrich their mathematical experience. Trips to renowned institutions such as Williams F1, Prodrive, Bletchley Park and MathsFest offer students unique insights into the practical applications of mathematics in real-world contexts. Furthermore, regular chess competitions and participation in UKMT challenges provide students with opportunities to develop problem-solving skills and compete at national levels. These experiences broaden students' horizons, instilling in them a passion for mathematics that extends beyond academic achievement.

In addition to providing opportunities for reflection and learning, assessment plays a central role in our mathematics curriculum. Regular learning reviews are conducted across key stages to consolidate the material covered in lessons and allow teachers to identify areas where students may need additional support or challenge. Furthermore, students from Year 7 to 10 participate in more granular assessments in the form of mastery quizzes at the end of every topic. These quizzes assess



students' fluency, reasoning, and problem-solving skills, aligning closely with the objectives outlined in the national curriculum. By incorporating a variety of assessment methods, we ensure that students receive timely feedback on their progress and are supported in achieving mastery of mathematical concepts at every stage of their academic journey.