



Curriculum Intent, Implementation & Impact



Vision: We aim for our young mathematicians to leave their secondary mathematical education at the Aylesford School, as confident mathematical problem solvers, mathematically equipped to face the challenges of everyday life, and both further and higher education.

<u>Intent</u>	<u>Implementation</u>	<u>Impact</u>
<p>At Aylesford School we intend for all students to become confident problem solvers in all areas of the mathematics curriculum.</p> <p>Students develop fluency in key mathematical facts, calculations, and associated vocabulary, and learn to recall these quickly and accurately. This provides a solid foundation to enable students to begin using reasoning skills and applying logical thinking in, initially, unfamiliar contexts. Through fluency and reasoning, students become confident problem solvers to enable them to apply their knowledge to new unfamiliar challenges.</p>	<p>To support the development, and to resource, the development of fluency, reasoning and problem solving, we have chosen the Hodder scheme of learning from the Mastering Mathematics series at KS3. Hodder resources have been selected, as the sequencing of topics matched those discussed by department colleagues, and the quality of resources, emphasising fluency, reasoning and problem solving.</p> <p>The nationally recognised White Rose scheme of work is used at KS4, and provides appropriate challenge and support at all levels in preparation for the GCSE.</p> <p>Both Hodder and White Rose follow the mastery approach allowing teachers to teach depth of understanding as well as secure fluency, reasoning and problem solving for each topic.</p> <p>All lesson starts with a 'Power of 3', made up of a recent recall, core knowledge and misconception question. Recent recall is included at the start of each lesson to support students in retaining prior learning. Core knowledge is essential to assess the starting point for the lesson for each student. A misconception box is included each lesson to draw out common and key areas students may struggle with and to highlight these to the class. Keywords are included in this section to support the literacy skills of students. The power of 3 has been adjusted for year 11 to include Corbett 5 A Day once a week. This ensures students see a variety of topics within their starter to further support their retrieval practice.</p> <p>Tasks are differentiated within lessons to allow students to explore, develop, secure and extend their understanding. Some lessons may focus on fluency, reasoning and problem solving within</p>	<p>Maths lessons are engaging and well-resourced with the students acknowledging that the journey to finding an answer is most important factor.</p> <p>Students are keen to attempt a range of problems and choose the equipment they need to help them to learn, along with the strategies they think are best suited to each scenario.</p> <p>Students develop skills in being articulate and are able to reason verbally, pictorially and in written form.</p> <p>Well-planned sequences of learning support students to develop and refine their maths skills.</p>

We provide a rich, balanced and varied curriculum with support for all students. Topics are taught for depth of understanding, where the language of mathematics is emphasised.

Culture capital is included at the start of each new topic, to enable students to gain an understanding of the application of their learning to the wider world, and making them aware of the historical significance and application of mathematics in everyday life.

one area of explore, develop, secure and extend while other lessons will have students progress through the stages. This ensures we have a balanced and varied curriculum providing support for students at all levels.

Students are able to independently apply their knowledge to a range of increasingly complex problems.



School of
CHARACTER

RESPECT SELF-DISCIPLINE **COURAGE**
OPEN-MINDEDNESS **MOTIVATION**
RESILIENCE CONFIDENCE **INTEGRITY**
COMPASSION **CURIOSITY**

 **Ofsted** Good Provider