

Mathematics Curriculum Intent

As a department we aim to promote a challenging curriculum to all our students that delivers depth and breadth in maths. We aim to enable students to become knowledgeable, flexible and resourceful mathematicians.

	OHA Curriculum Intent	Mathematics Intent
Broad and balanced	All students have the opportunity to study all subjects on the National Curriculum including PSHE and SRE. This should allow all students to develop emotionally, intellectually and creatively and provide an opportunity to follow their own journey towards their own aspiration.	<p>Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.</p> <p>The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.</p>

<p>Preparation for the future</p>	<p>We believe that all students should experience a solid foundation at Key Stage 3 and therefore all students follow a three-year Key Stage 3. This ensures that OHA students have the skills, knowledge and understanding to have a successful Key Stage 4 and open doors to both Post-16 study and future employment.</p>	<p>In addition to the obvious intention of preparing students for more advanced mathematical studies, mathematics also prepares students for future learning in other disciplines and improves the cognitive ability in general of students and, as such, is essential for their personal development. The study of mathematics conditions the brain to see connections and builds neural pathways that make the brain stronger for all other things. Mathematical study enhances students' general intelligence and supports the life-long learning of students by: creating a framework in the brain for systematic thinking, developing the ability to solve and analyse problems, stretching the mind to work on unfamiliar tasks with confidence, developing the sequencing skills critical to arriving at accurate results or logical conclusions, promoting caution and care in thinking and deciphering complex mathematical problems to arrive at an accurate answer and learning through trial and error to integrate different principles to arrive at a logical conclusion.</p>
<p>High aspirations:</p>	<p>We have designed a curriculum which is enjoyable, ambitious and motivates all students including SEND and the most disadvantaged towards lifelong learning.</p>	<p>We offer an aspirational curriculum which follows the national curriculum but also offers additional knowledge and skills that are applicable to life after secondary education. Our SEND students are further supported by the use of guidance for our lower ability students.</p>
<p>Promotes the Academy values</p>	<p>Our students will demonstrate Respect, Resilience and responsibility throughout their daily life at the academy.</p>	<p>All values are promoted and adhered to in each lesson. All conversations are conducted respectfully. Students are taught methods and skills needed to approach any mathematical problem in order to promote resilience. All students are responsible for their own learning as well as fostering an environment for all to learn.</p>

Rich knowledge based	Students will leave OHA following five years of study, fully prepared for a variety of ambitious destinations. By providing students with extended and independent learning, our students will be ready to embrace the wider world around them.	Students are equipped to leave the academy with the knowledge and skills to become an expert mathematician, know and understand key concepts and confidently use mathematical language. They will have experience in a broad variety of topics which will enable them to continue to develop skills further at a higher standard and also skills needed for day to day life.
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