Intent

Our Maths curriculum follows the Mathematics Mastery programme. The curriculum is designed with three principles in mind, with the aim to teach students the conceptual knowledge needed to solve mathematical problems successfully and with sufficient fluency to apply this knowledge to new and unfamiliar problems. Firstly, we focus on developing students' conceptual understanding of mathematical knowledge, rather than just computation skills. This means that, rather just practice procedures for solving problems, we want our students to have a clear, conceptual grasp of the underlying ideas or principles that shape mathematics by using multiple representations (concrete, pictorial and abstract) throughout the curriculum. Secondly, we explicitly teach mathematical language and vocabulary to strengthen and support students' mathematical reasoning and communication. Across our curriculum, students are expected to master the correct terminology, use appropriate signs and symbols, and demonstrate verbal reasoning by contributing to class discussion. Thirdly, our curriculum cultivates our students' capability to think mathematically; which is to say, to develop mathematical 'habits of mind' such as being systematic and seeking out patterns. Importantly, we believe that every one of our students has an entitlement to learn the whole curriculum: we support all students to access all of the key concepts, whilst allowing for differentiation through different levels of depth or mastery of learning. Students have access to the Hegarty Maths website to help imbed their understanding through practice and encourages independent learning.

Implementation

	Autumn Term I	Autumn Term II	Spring Term I	Spring Term II	Summer Term I	Summer Term II
Year 7	Content • Number systems • Factors and multiples • Axioms and Arrays • Arithmetic skills	Content • Order of operations • Positive and negative numbers • Angles • Classifying 2-D shapes	Content • Algebra introduction • Coordinates	Content • Prime factorisation • Conceptualising fractions	Content • Calculating with fractions and decimals • Ratio • Percentages	Content • Transformations • Constructions
Year 8	Content • Sequences • Equations • Inequalities	Content • Linear graphs • Accuracy and estimation	Content • Ratio • Real life graphs • Rates of change • Proportion	Content • Univariate and Bivariate data	Content • Angles in parallel lines • Angles in polygons • Bearings	Content • Circles and composite shapes • Volume and surface area of prisms

Year 9	Content • Sequences • Equations • Inequalities	Content • Linear graphs • Accuracy and estimation	Content • Ratio • Real life graphs • Rates of change • Proportion	Content • Univariate and Bivariate data	Content • Angles in parallel lines • Angles in polygons • Bearings	Content • Probability • Set notation • Venn diagrams • Sample spaces diagram
Year 10	Content • Number calculations • Algebraic expressions • Graphs, tables and charts	Content • Fractions and Percentages • Equations, inequalities and sequences	Content • Angles • Averages and range • Perimeter, Area and Volume	Content • Straight line graphs • Transformations	Content • Ratio and Proportion • Right-angled Triangles	Content • Probability • Multiplicative reasoning • Constructions, Loci and Bearings
Year 11	Content • Quadratic equations and Graphs • Perimeter, Area and Volume of complex shapes	Content • Fractions, indices and standard form • Congruence, similarity and vectors	Content • Circle theorems • Trigonometry	Content • Recap and revision		