

Programme of Study - Maths

We want to develop students who are engaged and curious about mathematics, and confident in **problem solving** because they are **proficient** at **reasoning**, and **fluent** with key maths concepts. Our teachers will be engaged and curious about students' learning. Students know where logical thinking can take them in life.

Year 7



| Year 7 | | | | | | |
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| Rationale/narrative | This is the first year of secondary school maths that students will study. We have designed the curriculum to develop number sense and place value first, as these are the building block of deep understanding. | | | | | |
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Topic | Number - Place value | Number – Multiplication and division | 2D Geometry | Fractions | Applications of algebra | Percentages and statistics |
| Content | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Place value (including decimals) Add and subtract (including decimals) Rounding Perimeter Mental strategies | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Factors and multiples Multiply and divide (including decimals) Area of rectangle, triangle and parallelogram Calculate the mean Further mental strategies | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Draw and measure angles Find unknown angles (straight lines, at a point, vertically opposite) Properties of triangles and quadrilaterals Unit conversions (linear) Symmetry and tessellation | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Equivalent fractions Compare and order fractions and decimals Change mixed numbers to improper fractions and vice versa Fraction of a quantity Multiply and divide fractions | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Order of operations Substitution Form and simplify algebraic expressions Expand over a single bracket, and factorise Sequences (term-to-term, not n^{th} term) | <p>Knowledge and skills covered:</p> <ul style="list-style-type: none"> Construct and interpret statistical diagrams including pie charts Convert between percentages, vulgar fractions and decimals Percentage of a quantity Find the whole, given the part and the percentage |

