



MATHS CURRICULUM OVERVIEW – UPPER KEY STAGE TWO (Y5 AND Y6)

St. Stephen's follows the mathematics guidelines as set out by the National Curriculum.

YEAR 5 KEY MATHS OBJECTIVES	YEAR 6 KEY MATHS OBJECTIVES
<ul style="list-style-type: none"> • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number • Compare and order fractions whose denominators are all multiples of the same number • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Add and subtract fractions with the same denominator and denominators that are multiples of the same number • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • Read and write decimal numbers as fractions • Round decimals with two decimal places to the nearest whole number and to one decimal place • Read, write, order and compare numbers with up to three decimal places • Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes • Use the properties of rectangles to deduce related facts and find missing lengths and angles 	<ul style="list-style-type: none"> • Use negative numbers in context, and calculate intervals across zero • Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • Use their knowledge of the order of operations to carry out calculations involving the four operations • Use common factors to simplify fractions • Compare and order fractions, including fractions > 1 • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • Multiply simple pairs of proper fractions, writing the answer in its simplest form • Divide proper fractions by whole numbers • Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction • Multiply one-digit number with up to two decimal places by whole numbers • Use written division methods in cases where the answer has up to two decimal places • Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts • Solve problems involving similar shapes where the scale factor is known or can be found • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. • Use simple formulae • Generate and describe linear number sequences • Express missing number problems algebraically • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Convert between miles and kilometres • Calculate the area of parallelograms and triangles • Calculate, estimate and compare volume of cubes and cuboids using standard units • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius • Find unknown angles in any triangles, quadrilaterals, and regular polygons • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles • Describe positions on the full coordinate grid (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. • Interpret and construct pie charts and line graphs • Calculate and interpret the mean as an average