

Maths Key Skills – Year 5

Term 1 / Term 2 / Term 3 / Term 4 / Term 5 / Term 6

Number and Place Value	<ul style="list-style-type: none"> • Read, write, order & compare numbers to at least 1 000 000 & determine the value of each digit. • Count forwards/backwards in steps of powers of 10 for any given number up to 1 000 000 • Interpret negative numbers in context, count forwards/backwards with positive & negative whole numbers through zero • Round any number up to 1 000 000 to nearest 10, 100, 1000, 10,000 & 100 000 • Solve number problems/practical problems that involve all of the above. • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
Addition and Subtraction	<ul style="list-style-type: none"> • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • Add and subtract numbers mentally with increasingly large numbers • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Multiplication and Division	<ul style="list-style-type: none"> • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • Establish whether a number up to 100 is prime and recall prime numbers up to 19 • 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 • Multiply and divide numbers mentally drawing upon known facts • 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 • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
Fractions	<ul style="list-style-type: none"> • 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 • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] • 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 [for example, $0.71 = \frac{71}{100}$] • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • 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 • Solve problems involving number 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 • Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.
Statistics	<p><u>Statistics</u></p> <ul style="list-style-type: none"> • Solve comparison, sum & difference problems using information presented in a line graph • Complete, read & interpret information in tables, including timetables
Shape	<p><u>Geometry - Properties of Shape</u></p> <ul style="list-style-type: none"> • Identify 3D shapes from 2D representations • Know angles are measured in degrees • Estimate & compare acute, obtuse & reflex angles • Draw given angles & measure in degrees • Identify angles at a point & one whole turn (total 360°) • Identify angles at a point on a straight line & a $\frac{1}{2}$ turn (total 180°) • Identify other multiples of 90°
Measuring	<p><u>Measurement</u></p>

	<ul style="list-style-type: none"> • Convert between different units of metric measure • Understand and use equivalences between metric units & common imperial units • Measure & calculate perimeter of composite rectilinear shapes in cm/m • Calculate & compare area of squares & rectangles using standard units, square cm & square metres • Estimate area of irregular shapes • Estimate volume & capacity • Solve problems involving converting between units of time <p>Use of 4 operations to solve measure problems</p>
Position and Direction	<ul style="list-style-type: none"> • Describe positions on a 2D grid as co-ordinates in 1st quadrant • Describe movements between positions as translations of a given nit to the left/right & up/down
Algebra	
Ratio and Proportion	