Year 5 Maths Yearly Overview

	Autumn Term	Spring Term	Summer Term
Week 1	Place Value (A Million Numbers) read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • solve number problems and practical problems that involve all of the above • read Roman numerals to 1000 (M) and recognise years written in Roman numerals	Exploring Decimals • 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 • solve problems involving number up to three decimal places	Positive and negative numbers • count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero • solve number problems and practical problems that involve all of the above • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
Week 2	Place Value (What's the Total) Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • 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	Calculating decimals • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • read, write, order and compare numbers with up to three decimal places • solve problems involving number up to three decimal places • read and write decimal numbers as fractions • add and subtract fractions with the same denominator and denominators that are multiples of the same number	Percentage and proportion • 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 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25

Year 5 Maths Yearly Overview

Week 3	<u>Place Value (What's the difference)</u> • Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • 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	<u>Decimals and fractions</u> • 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	<u>Investigating shapes</u> • identify 3-D shapes, including cubes and other cuboids, from 2-D representations • draw given angles, and measure them in degrees (o) • use the properties of rectangles to deduce related facts and find missing lengths and angles • distinguish between regular and irregular polygons based on reasoning about equal sides and angles
Week 4	<u>Addition/Subtraction methods</u> • 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 • solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	<u>Mental and written addition/subtraction</u> • 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	<u>Symmetry, reflection and coordinates</u> • identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed
Week 5	<u>Fractions</u> • compare and order fractions whose denominators are all multiples of the same number		<u>Squares, cubes and factors</u> • identify multiples and factors, including finding all factor pairs of a

Year 5 Maths Yearly Overview

	• 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 • add and subtract fractions with the same denominator and denominators that are multiples of the same number	• solve problems involving number up to three decimal places.	number, and common factors of two numbers • multiply and divide numbers mentally drawing upon known facts • 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
Week 6		<u>Short Division</u> • 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 • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	<u>Factors and multiples</u> • identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • multiply and divide numbers mentally drawing upon known facts • solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

Year 5 Maths Yearly Overview

Week 7	<u>Methods for multiplying and dividing (grid method)</u> • 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 • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	<u>Formal multiplication</u> • 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	<u>Primes, squares and cubes</u> • 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 • 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
Week 8	<u>Angles and Triangles</u> • know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees (º) • identify angles at a point and one whole turn (total 360º) • identify angles at a point on a straight line and 1/2 a turn (total 180º) • identify other multiples of 90º	<u>Let's Calculate</u> • multiply and divide numbers mentally drawing upon known facts • 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	<u>Graphs and Diagrams</u> solve comparison, sum and difference problems using information presented in a line graph

Year 5 Maths Yearly Overview

Week 9	Changing Time (number line method) • solve problems involving converting between units of time • complete, read and interpret information in tables, including timetables	Converting measures • convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • use all four operations to solve problems involving measure using decimal notation, including scaling	Describing data • solve comparison, sum and difference problems using information presented in a line graph • complete, read and interpret information in tables, including timetables
Week 10	Measuring Shapes 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	Solving multiplication and division • 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 • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates • 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	Revision (based on assessment results)
Week 11	Length, weight and capacity • convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and	Calendars, timetables and calculators • solve problems involving converting between units of time • complete, read and interpret information in tables, including timetables	Revision (based on assessment results)

Year 5 Maths Yearly Overview

	millimetre; gram and kilogram; litre and millilitre) • estimate volume and capacity • use all four operations to solve problems involving measure using decimal notation, including scaling		