

# Mathematics Programmes of Study

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I can recognise years written in Roman numerals.	I can solve addition multi-step problems in contexts, deciding which operations and methods to use and why.	I can solve problems including scaling by simple fractions and simple rates.	I can write percentages as a fraction.	I can solve problems involving addition and subtraction of units of measures using decimal notation.	I can distinguish between regular and irregular polygons.	
I can read Roman numerals to 1000 (M).		I can recognise and use square numbers and cube numbers.	I can recognise the % symbol and understand what it means.		I can state and use the properties of a rectangle to deduce related facts.	
I can solve number problems and practical problems.	I can solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.	I can solve problems numbers up to 3 decimal places.	I can solve problems involving converting between units of time.	I can draw shapes using given dimensions and angles.	I can present information using ICT.
I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100, 000.	I can use rounding to check answers to calculations.	I can divide numbers up to 4 digits by a 1 digit number using an efficient written method.	I can read, write, order and compare numbers with up to 3 decimal places.	I can recognise and estimate volume and capacity.	I can compare different angles.	I can read and interpret information in tables including timetables.
I can use negative numbers in context and can count forwards and backwards with positive and negative numbers through 0.	I can subtract mentally using increasingly large numbers.	I can multiply numbers up to 4 digits by a one or 2 digit number.	I can round decimals with 2 decimal places to the nearest whole number and to one decimal place.	I can estimate the area of irregular shapes.	I can identify reflex angles.	I can complete information in tables including timetables.
I can count forwards or backwards in steps of powers of 10 for any given Number up to 1,000,000.	I can add mentally using increasingly large numbers.	I can establish whether a number up to 100 is prime and recall prime numbers up to 19.	I can recognise and use 1000ths and relate them to 10ths, 100ths and decimal equivalents.	I can calculate and compare the area of squares and rectangles.	I can identify angles at a point and one whole turn.	I can solve 'difference' problems using information presented line graphs.
I know what each digit represents in numbers to 1,000,000.	I can subtract numbers with more than 4 digits using efficient written methods.	I can know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.	I can read and write decimal numbers as fractions.	I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.	I can identify angles at a point on a straight line and 1/2 a turn.	I can solve 'sum' problems using information presented in line graphs.
I can read, write, order and compare numbers to at least 1,000,000.	I can add numbers with more than 4 digits using efficient written methods.	I can solve problems using multiplication and division.	I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	I understand and use basic equivalences between metric and common imperial units.	I can identify multiples of 90 degrees.	I can solve 'comparison' problems using information presented in line graphs.
		I can identify multiples and factors, including finding all factor pairs.	I can add and subtract fractions with the same denominator and related fractions.	I can convert between different units of measure (e.g. Kilometre to metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre).	I can draw a given angle, writing its size in degrees.	
			I can recognise mixed numbers and improper fractions and convert from one form to another.		I know angles are measured in degrees and can estimate and measure them.	
			I can compare and order fractions whose denominators are all multiples of the same number.		I can identify 3-D shapes, including cubes and cuboids, from 2-D presentations.	
<b>Number, place value and rounding</b>	<b>Addition and Subtraction</b>	<b>Multiplication and Division</b>	<b>Fractions and Decimals</b>	<b>Measures</b>	<b>Geometry</b>	<b>Statistics</b>