

Maths Standard 5 (Year 5)

Name: _____

Standard 6 is the aspirational expectation for pupils by the end of Year 6.

Area		Bold statements are Key performance Indicators	Secure
Number	Place Value	Reads, writes, orders and compares numbers to at least 1 000 000 and determines the value of each digit.	
		Counts forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
		Interprets negative numbers in context, counts forwards and backwards with positive and negative whole numbers, including through zero	
		Rounds any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	
		Solves number problems and practical problems that involve all of the above	
		Read Roman numerals to 1000 (M) and recognises years written in Roman numerals	
	+ & -	Adds and subtracts whole numbers with more than 4 digits, including using formal written methods	
		Adds and subtracts numbers mentally with increasingly large numbers.	
		Uses rounding to check answers to calculations and determines, in the context of a problem, levels of accuracy	
		Solves addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
	X & ÷	Identifies multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	
		Knows and uses the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
		Establishes whether a number up to 100 is prime and recall prime numbers up to 19	
		Multiplies numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	
		Multiplies and divides numbers mentally drawing upon known facts	
		Divides numbers up to 4 digits by a one-digit number using the formal written method of short division and interprets remainders appropriately for the context	
		Multiplies and divides whole numbers and those involving decimals by 10, 100 and 1000	
		Recognises and uses square numbers and cube numbers, and the notation for squared (²) and cubed (³).	
		Solves problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	
		Solves problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	
	Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates		
	Fractions, decimals and %	Compares and orders fractions whose denominators are all multiples of the same number	
		Identifies, names and writes equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
		Recognises mixed numbers and improper fractions and converts from one form to the other and writes mathematical statements > 1 as a mixed number	
		Adds and subtracts fractions with the same denominator and denominators that are multiples of the same number.	
		Multiplies proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
		Reads and writes decimal numbers as fractions.	
Recognises and uses thousandths and relates them to tenths, hundredths and decimal equivalents			
Rounds decimals with two decimal places to the nearest whole number and to one decimal place			
Reads, writes, orders and compares numbers with up to three decimal places			
Solves problems involving number up to three decimal places			
Recognises the per cent symbol (%) and understands that per cent relates to 'number of parts per hundred', and writes percentages as a fraction with denominator 100, and as a decimal			
Solves 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			

Shape, Space, Measures and Statistics			
Measures		Converts between different units of metric measure (eg, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	
		Understands and uses approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
		Measures and calculates the perimeter of composite rectilinear shapes in centimetres and metres	
		Calculates and compares the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimates the area of irregular shapes.	
		Estimates volume and capacity	
		Solves problems involving converting between units of time	
		Uses all four operations to solve problems involving measure using decimal notation, including scaling	
Shape		Identifies 3-D shapes, including cubes and other cuboids, from 2-D representations	
		Knows angles are measured in degrees: estimates and compares acute, obtuse and reflex angles	
		Draws given angles, and measure them in degrees (°).	
		Identifies angles at a point and one whole turn (total 360°)	
		Identifies angles at a point on a straight line and 1/2 a turn (total 180°)	
		Identifies other multiples of 90°	
		Uses the properties of rectangles to deduce related facts and finds missing lengths and angles	
	Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles		
Position		Identifies, describes and represents the position of a shape following a reflection or translation, using the appropriate language, and knows that the shape has not changed	
Statistics		Solves comparison, sum and difference problems using information presented in a line graph	
		Completes, reads and interprets information in tables, including timetables	

Beginning + = At least 6 KPIs and at least 10 statements overall

Developing = At least 7 KPIs and at least 13 statements overall

Developing + = At least 12 KPIs and at least 20 statements overall

Secure = At least 17 KPIs and at least 31 statements overall

Exceeding = At least 23 KPIs and at least 41 statements overall

