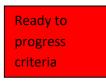


## Year 4 Curriculum Map – Maths Number and Calculation





During key stage 2 pupils use the number system more confidently. They move from counting reliably to calculating fluently with all four number operations. They always try to tackle a problem with mental methods before using any other approach. Pupils explore features of shape and space and develop their measuring skills in a range of contexts. They discuss and present their methods and reasoning using a wider range of mathematical language, diagrams and charts.

Half Term 1 Numbers to 5000 (including 0.1 and 0.01) Calculation – Addition and Subtraction Multiplication and Division Fractions and Decimals Concrete and Pictorial	Half Term 2 Number to 10,000 Calculation – Addition and Subtraction Multiplication and Division Fractions and Decimals	Half Term 3 Number to 10,000 Multiplication and Division Fractions and Decimals	Half Term 4 Numbers to 10,000 Multiplication and Division Fractions and Decimals	Half Term 5 Numbers up to 10,000 Calculation – Addition and Subtraction Multiplication and Division Fractions and Decimals	Half Term 6 Numbers up to 10,000 Calculation – Addition and Subtraction Multiplication and Division Fractions and Decimals
Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers usin different representations.
Number and place value  Read and write numbers above in digits and words.	Read and write numbers above, including Roman numerals to 100.	Read and write numbers above.	Read and write numbers above.	Read and write numbers above.	Count to and across 200, forwards and backwards.
Compare and order numbers. Use < > = signs.	Compare and order numbers. Use < > = signs.	Compare and order numbers. Use < > = signs. Find 1000 more or less than.	Compare and order numbers. Use < > = signs. Compare numbers with the same number of decimal places up to 2dp.		
<b>4NPV–2</b> Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.	Recognise place value of TH H T U.	Recognise place value of Tth TH H T U.	Recognise place value of Tth TH H T U.	Recognise place value of Tth TH H T U.	Recognise place value of Tth TH H T U.
4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100	4NPV-3 Reason about the location of any fourdigit number in the linear number system, including identifying the previous and next multiple of 1,000 and	Round any number to the nearest 10.	4NPV-3 Round any number to the nearest 100	4NPV-3 Round any number to the nearest 1000	<b>4NPV-4</b> Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.
Count, read and write numbers	100,				
Count backwards through zero to include negative numbers.	Count in 10s,100s and 1000s forwards and back. Find 1000 more than less than a given number.	Count in 10s,100s and 1000s forwards and back. Find 1000 more than less than a given number.	Count in 25s forwards and back.	Count in 6s, 7s and 9s forwards and back.	Count in 6s, 7s and 9s forwards and back. Count forwards in multiples of 75
Addition and Subtraction - solve addition and subt	raction two-step problems in contexts, decid	ding which operations and methods to use	and why.		
Add and subtract 3-digit numbers using column method.	Add and subtract 3-digit numbers using column method.	Add and subtract 4-digit numbers using column method.		Add and subtract 4-digit numbers using column method.	
Estimate and use inverse operations to check.	Estimate and use inverse operations to check.	Estimate and use inverse operations to check.		Estimate and use inverse operations to check.	
Multiplication and Division - solve problems involved			on problems such as which n objects are co		
Recall tables facts – 2, 3, 4, 5, 8, 10x tables. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying	Recall X and ÷ facts for 6 and 9x table whilst continuing to practise previous tables learnt.  4NF-2 Divide 2-digit and 3-digit numbers	Recall X and ÷ facts for 6, 7 and 9x table whilst continuing to practise previous tables learnt.	Recall X and ÷ facts for all tables up to 10x10 and recognise the multiples.	Recall X and ÷ facts for all tables up to 12x12 and recognise multiples up to 12x12.	<b>4NF-1</b> Recall X and ÷ facts for all tables up to 12x12 and recognise multiples up to 12x12.
together three numbers.	by a 1-digit number using formal written layout.			Recognise square numbers.	Recognise square numbers.
Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	<b>4MD–2</b> Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication	Recognise and use factor pairs and commutativity in mental calculations.		Divide 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)
<b>4MD–1</b> Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	Recognise and use factor pairs and commutativity in mental calculations.	4MD–3 Understand and apply the distributive property of multiplication			
Decimals - solve simple measure and money proble	ems involving fractions and decimals to two	decimal.			
Recognise and write decimal equivalents of any number of tenths or hundredths.	Find the effect of dividing a one- or two- digit number by 10 and 100, identifying the value of the digits in the answer as	Recognise and write decimal equivalents to ½, ¼, and ¾.	Recognise and write decimal equivalents to ½, ¼, ¾ and 1/10.		Round decimals with one decimal place to the nearest whole number.

Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	ones, tenths and hundredths.				Compare numbers with the same number of decimal places up to two decimal places.		
Fractions - solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.							
Count up and down in hundredths; recognise that	Recognise and show using diagrams,	Recognise and show using diagrams,	Recognise and show using diagrams,	Add and subtract fractions with the same	4F-3 Add and subtract improper and mixed		
hundredths arise when dividing an object by one	families of common equivalent fractions.	families of common equivalent fractions.	families of common equivalent fractions.	denominator.	fractions with the same denominator, including		
hundred and dividing tenths by ten.					bridging whole numbers.		
		Compare and order unit fractions with	Compare and order unit fractions with	Recognise, find and write fractions of a	Recognise, find and write fractions of a discrete		
		the same denominator.	the same denominator.	discrete set of objects; unit fractions and	set of objects; unit fractions and non-unit		
				non-unit fractions with small	fractions with small denominators.		
		<b>4F–1</b> Reason about the location of mixed		denominators.	<b>4F–2</b> Convert mixed numbers to improper		
		numbers in the linear number system			fractions and vice versa		



## Year 4 Curriculum Map – Maths Geometry, Measurement and Statistics



Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Numbers to 500 (including 0.1 and 0.01) Money Shape	Number to 1000 Money Shape	Number to 5000 Measurement – Area and Perimeter Co-Ordinates	Numbers to 5000 Time Position and Direction	Numbers up to 10,000 Capacity Statistics	Numbers up to 10,000 Mass
Measurement – Money - solve simple measure and	d money problems involving fractions and d	ecimals to two decimal.			
Estimate, compare and calculate different measures, including money in pounds and pence.	Estimate, compare and calculate different measures, including money in pounds and pence.				
Solve simple problems in a practical context involving addition and subtraction of money using pounds and pence including giving change.	Solve simple problems in a practical context involving addition and subtraction of money using pounds and pence including giving change.				
Measurement – Units of Measure – Solve Simple p	roblems involving units of measure and are	a and perimeter.			
		Choose and use appropriate standard units to estimate and measure add, subtract and compare length/height in any direction (m/cm) using rulers, tape measures, metre sticks.  Convert between units of measure.  Find the area of rectilinear shapes by counting.  Measure and calculate the perimeter of a	4G-2 Find the perimeter of regular and irregular polygons	Choose and use appropriate standard units to estimate and measure add, subtract and compare temperature (°C) and capacity (I/mI) to the nearest appropriate unit using scales and thermometers. Convert between units of measure.	Choose and use appropriate standard units to estimate and measure add, subtract and compare mass (g/kg) to the nearest appropriate unit using a range of measuring vessels.  Convert between units of measure.
		rectilinear figure (including squares) in centimetres and metres.			
Measurement – Time - Solve Simple problems invo	olving time.				
			Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	4NPV-4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	
			Read, write and convert time between analogue and digital 12 and 24-hour clocks.	20 equal parts.	
Geometry – Shape, Position and Direction					
<b>4G-2</b> Identify and name regular and irregular polygons (as year 3 as well as quadrilaterals and equilateral, isosceles, scalene and right angle triangles).	<b>4G-3</b> Identify lines of symmetry in 2-D shapes presented in different orientations.	Describe positions on a 2-D grid as coordinates in the first quadrant.	<b>4G-1</b> Plot specified points and draw sides to complete a given polygon.		
Identify and name of 3D shapes (cones cylinders, prisms pyramids, cubes, cuboids, spheres, hemi-spheres, tetrahedrons).					
Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.			Describe movements between positions as translations of a given unit to the left/right and up/down.		
Identify acute and obtuse angles and compare and order angles up to two right angles by size.	<b>4G-3</b> Complete a simple symmetric figure with respect to a specific line of symmetry.				
Statistics					
				Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	
				Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	