Year 4 Curriculum Map – Maths

St Christopher PRIMARY SCHOOL

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.

Term 1 Number to 10,000 Number: Place Value (4 Weeks) Calculation – Addition and Subtraction (3 Weeks) Measurement – Area (1 Week) Number: Multiplication and Division (3 Weeks)	Term 2 Number to 10,000 Number: Multiplication and Division (3 Weeks) Measurement –Length and Perimeter (2 Weeks) Number: Fractions (4 Weeks) Number: Decimals (3 Weeks)	Term3 Numbers up to 10,000 Number: Decimals(2 Weeks) Measurement: Money (2 Weeks) Measurement: Time (2 Weeks) Geometry: Shape (2 Weeks) Statistics (1 Week) Geometry : Co-Ordinates Position and Direction (2 Weeks)
Concrete and Pictorial		
Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.
Number and place value		
Read and write numbers above in digits and words.	Read and write fractions in digits and words.	Compare numbers with the same number of decimal places up to 2dp.
Compare and order numbers. Use < > = signs.	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	
Recognise place value of TH H T U.	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.	
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–2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.		
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 100.		
Read and write numbers above, including Roman numerals to 100.		
Recognise place value of Tth TH H T U.		
Find 1000 more or less than.		
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		
Count, read and write numbers		
Count backwards through zero to include negative numbers.	Count in 10s,100s and 1000s forwards and back.	Count in 6s, 7s and 9s forwards and back.
Count in 10s,100s and 1000s forwards and back.	Count in 25s forwards and back.	Count forwards in multiples of 75
	Count up and down in known fractions beyond 1.	
Addition and Subtraction - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.		
Add and subtract 3-digit numbers using column method.		
Estimate and use inverse operations to check.		
Add and subtract 4-digit numbers using column method.		
Estimate and use inverse operations to check.		
Multiplication and Division - solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects.		
TTRS to be monitored throughout the year.	Recognise and use factor pairs and commutativity in mental calculations.	
	4MD–1 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.	
Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.	4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)	
4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication	4NF–1 Recall X and ÷ facts for all tables up to 12x12 and recognise multiples up to 12x12.	
	4MD–3 Understand and apply the distributive property of multiplication	
	Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	
	4NF–2 Divide 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	
	Decimals - solve simple measure and money problems involving fractions and decimals to two decimal.	
	Recognise and write decimal equivalents of any number of tenths or hundredths.	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.	Compare numbers with the same number of decimal places up to two decimal places.

			Recognise and write decimal equivalents to ½, ¼, ¾ , 1/10 and 1/100

	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.	
	Recognise and show using diagrams, families of common equivalent fractions.	
	Compare and order unit fractions with the same denominator.	
	4F–1 Reason about the location of mixed numbers in the linear number system	
	4F–2 Convert mixed numbers to improper fractions and vice versa	
	4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	

		Measurement – Money - solve simple measure and money problems involving fractions and decimals to two decimal.
		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.

Measurement – Units of Measure – Solve Simple problems involving units of measure and area and perimeter.

Find the area of rectilinear shapes by counting.	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.	
	4G–2 Find the perimeter of regular and irregular polygons	
	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	

Measurement – Time - Solve Simple problems involving time.

	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
	Read, write and convert time between analogue and digital 12 and 24-hour clocks.

Geometry – Shape, Position and Direction

	Identify acute and obtuse angles and compare and order angles up to two right angles by size.
	4G-2 Identify and name regular and irregular polygons (as year 3 as well as quadrilaterais and equilateral, isosceles, scalene and right angle triangles).
	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.
	4G-3 Identify lines of symmetry in 2-D shapes presented in different orientations.
	4G-3 Complete a simple symmetric figure with respect to a specific line of symmetry.
	4G-1 Plot specified points and draw sides to complete a given polygon.
	Describe positions on a 2-D grid as coordinates in the first quadrant.
	Describe movements between positions as translations of a given unit to the left/right and up/down.

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.

Rainbow Challenge

Uranus		Saturn	Jupiter	Mars	Earth
Count in multiples of 50 Count in 100s from any given number Know by heart multiplication facts for the 8 times table Know by heart division facts for the 8 times table Double any number up to 500		Count forwards in multiples of 25 Count forwards in 50s from any given number Know by heart multiplication facts for the 6 times table Know by heart division facts for the 6 times table Halve any even number up to 500	Count backwards in multiples of 25 Count backwards in 50s from any given number Know by heart multiplication facts for the 9 times table Know by heart division facts for the 9 times table Double any number up to 1000	Know by heart multiplication facts for the 7 times table Know by heart division facts for the 7 times table Know by heart multiplication facts for the 11 times table Know by heart division facts for the 11 times table Halve any even number up to 1000	Know by heart multiplication facts for the 12 times table Know by heart division facts for the 12 times table Know by heart number bonds to 1000 (multiples of 10 and 100) Round any number to the nearest 10 Count forwards in multiples of 75