Year 3 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 Place Value: Numbers to 1000 (3 Weeks) Calculation – Addition and Subtraction (5 Weeks) Multiplication and Division(4 Weeks)	Term 2 Number to 1000 Calculation -Multiplication and Division (3 Weeks) Measures: Length and Perimeter (3 Weeks) Fractions(3 Weeks) Measures: Mass and Capacity (3 Weeks)	Term 3 Numbers to 1000 Fractions (2 Weeks) Measures: Money (2 Weeks) Measures: Time (3 weeks) Geometry: Shape (2 Weeks) Statisitics (2 Weeks) Consolidation week to end the final term.
Concrete and Pictorial		
Identify, represent and estimate numbers (0-1000) using concrete objects, pictorial representation and a number line/hundred square.	Identify, represent and estimate numbers (0-1000) using concrete objects, pictorial representation and a number line/hundred square.	Identify, represent and estimate numbers (0-1000) using concrete objects, pictorial representation and a number line/hundred square.
Number and place value		
Read and write numbers from (0-1000) in digits and words	Read and write numbers from (0-1000) in digits and words	Read and write numbers from (0-1000) in digits and words.
3NPV-3 Compare and order numbers from (0-1000) Use < > = signs.	**3NPV-4** Divide 100into 2,4,5,and 10 equal parts and read scales/number lines marked in multiples of 100 with 2,4,5 and 10 equal parts.	Round numbers up to 1000 to the nearest 10.
3NPV-2 Recognise place value of each digit in a three-digit number (hundreds, tens and ones).		
3NPV-1 Know that 10 tens are equivalent to 1 hundred and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three digit multiples of 10.		
Count, read and write numbers including money		
Count coins (1p, 2p, 5p, 10p, 20p and 50p).	Finding 100 more or less than a given number.	Count in eights.
Count in steps of ones, twos, fives and tens from 0 – 500 forwards and backwards.	Count in steps of ones, twos, threes, fours, fives, eights and tens from 0 – 500 forwards and backwards.	Count up and down in tenths. .
Count in steps of one hundred from 0 – 1000 forwards and backwards. **3NPV-3** Finding 10 more or less than a given number. **3NPV-3**Finding 100 more or less than a given number		
Addition and Subtraction - Solve problems including missing number problems, using number facts, place value and more complex addition and subtraction.		
3AS-1 3NF-1 Recall and use addition and subtraction facts to 100 fluently.		
3NF-3 Derive and use related facts to 200.		
Add and subtract numbers using concrete objects, pictorial representations mentally and using written methods, including: A two-digit number and ones A two-digit number and tens Two two-digit numbers Adding three one-digit numbers. **3AS-2** Add and subtract numbers using column addition and subtraction, including: A two-digit number and a three-digit number Two three-digit numbers.		
3AS-3 Estimate the answer to a calculation and use inverse operation to check answers.		
Multiplication and Division - Solve problems including missing number problems involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.		
TTRS tracking for the whole year. .	**3MD-1** Calculate mathematical statements for multiplication and division for two digit numbers times one digit numbers using a range of concrete resources, mental and written methods.	
Calculate mathematical statements for multiplication and division using the multiplication tables that they know; including a range of concrete and mental methods	Recognise and use the inverse relationship between multiplication and division in calculations.	
3NF-2 Recall and use multiplication and division facts for the 2, 3, 4, 5, 8, 10x table. Identify multiples.	Develop their understanding of multiplication by focusing on scaling as opposed to repeated addition	
Recognise odd and even numbers including those with three digits.		
Recognise and use the inverse relationship between multiplication and division in calculations.		
Fractions including problem solving with all of the below.		
	Count up and down in tenths.	**3F-2** Find unit fractions of quantities using known division facts

		Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	
		Compare and order unit fractions with the same denominator.	**3F-4** Add and subtract with the same denominator within one whole e.g.: 5/7 + 1/7=6/7.
		Recognise and show using diagrams and equivalent fractions with small denominators. including number lines and bar models	Recognise find and write fractions of a discrete set of objects e.g.: ¾ of 32 unit fractions and non-unit fractions with small denominators.
		3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.	Partition the whole.
		3F-3 Reason about the location of any fraction within 1 in the linear number system	

			Measurement - Money
			Convert Pounds and pence
			Add and subtract amounts of money to give change, using both £ and p in practical contexts.
			Solve simple problems in a practical context involving addition and subtraction of money using pounds and pence including giving change.
		Measurement – Units of Measure	
		Choose and use appropriate standard units to estimate and measure add, subtract and compare length/height in any direction (m/cm/mm) using rulers, tape measures, metre sticks.	
		Measure the perimeter of simple 2d shapes.	
		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.	
		Use scales of 2/4/5/10 increments.	
		Choose and use appropriate standard units to estimate and measure add, subtract and compare temperature (ºC) and capacity (l/ml) to the nearest appropriate unit using scales and thermometers.	
			Measurement – Time
			Tell and write the time from an analogue clock, including using Roman numerals from I to XII in 12 hour clock.
			Estimate and read time with increasing accuracy to the nearest minute and record and compare time in seconds, minutes and hours. Vocabulary: seconds, minutes, hours, o'clock, am/pm, morning afternoon, noon and midnight.
			Read time on a digital clock.
			Know the number of seconds in a minute and the number of days in months, year and leap year.
			Compare duration of events.
			Geometry - Shape, Position and Direction
			Recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn.
			Identify whether angles are greater than or less than a right angle.
			Identify and name regular and irregular polygons (as year 1 and 2 as well as pentagons, hexagons, octagons, nonagons, decagons).
			Identify and name of 3D shapes (cones cylinders, prisms, pyramids, cubes, cuboids, spheres).
			Identify and describe the properties of a range of 3-D shapes, including the number of edges, vertices and faces.
			3G-2 Identify horizontal and vertical lines and pairs of perpendicular and parallel lines in 2d shapes. Draw polygons by joining marked points.
			3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.
			Compare and sort 2-D and 3-D shapes.
			Draw 2-D Shapes and make 3-D Shapes using modelling materials; recognise 3d shapes in different orientations and describe them.
			Describe positions on a simple co-ordinates grid in one quadrant.
			Statistics
			Interpret and present data using bar charts, pictograms and tables.
			Solve one step and two step questions such as How many more? How many less? Using information presented in scaled tables and bar charts.

Understand and use key vocabulary

Greater than, less than, equals, digit, place value, number bonds, addition, subtraction,	Greater than, less than, equals, digit, place value, number bonds, addition, subtraction, multiplication, division, double, halve, odd, even, other words for addition, other words for subtraction, 2D and names of common polygons, symmetry 3D and names of common polyhedrons	multiplication, division, pounds, pence other words for multiplication and division, Problem solving, one step, two step, quantity, measure, total value, length, longer, shorter, 2D and names of common polygons, symmetry	Capacity, temperature, calibration, degrees, Celsius, thermometer, scale,	Mass, names of fractions, inverse, set, weight, heavier, lighter, gram, kilogram, compare, sequence, minutes, second, hour, day, week, month, year	Movement, straight line, rotation as a turn, right angles for quarter, half and three quarter turns, clockwise and anticlockwise, change, equivalence, array
Rainbow Challenge					
	Violet Count forwards in steps of 3 Count backwards in steps of 3 Know by heart sums and differences of multiples of 10 to 200(e.g. 30 + 80 = or 50 – 30 =) Know by heart all number bonds to 100 (multiples of 5 and 10) Double any number up to 50 Halve any even number up to 50	**Gold** Know by heart multiplication facts for the 3 times table Know by heart division facts for the 3 times table Know by heart all number bonds to 100 Double any number up to 100 Halve any even number up to 100			**Neptune** Read & write all numbers to 1000 in digits & words Find 100 more than a given number up to 1000 Find 100 less than a given number up to 1000 Know by heart multiplication facts for the 4 times table Know by heart division facts for the 4 times table