St Thomas of Canterbury Catholic Primary School

Maths Progression Framework

As a mathematician …

Focus	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number: Place Value	-I can display fast recognition of up to 3 objects, without having to count them individually ('subitising') -I can recite numbers past 5 -I can say one number for each item in order: 1,2,3,4,5 -I know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle') -I can show 'finger numbers' up to 5 -I am experimenting with his/her own symbols and marks as well as numerals -I can compare quantities using language such as ; 'more than', 'fewer than'	-I can sort objects -I can count objects -I can count objects from a larger group -I can represent objects -I can recognise numbers as words -I can count on from any number 1 more -I can count backwards within 10 1 less -I can compare groups by matching -I can understand the concepts of: fewer, more, same Less than, greater than, equal to -I can compare numbers -I can order objects and numbers -I can use the number line -I can use a Part-whole model -I can count within 20 -I can understand 10 -I can understand 11, 12 and 13	-I can recognise numbers to 20 -I can count objects to 100 by making 10s -I can recognise tens and ones -I can use a place value chart -I can partition numbers to 100 -I can write numbers to 100 in words -I can flexibly partition numbers to 100 -I can write numbers to 100 in expanded form -I can recognise 10s on the number line to 100 -I can recognise 10s and 1s on the number line to 100 -I can estimate numbers on a number line -I can compare objects -I can compare numbers -I can order objects and numbers -I can count in 2s, 5s and 10s	-I can represent numbers to 100 and 1,000 and know the value of each digit -I can count in hundreds -I can partition numbers to 100 and 1000 -I can recognise 100s, 10s and 1s -I can find 1, 10, 100 more or less than a given number -I can estimate on a number line to 1,000 - I can compare, read and write numbers up to ,1000 in numerals and words -I can order numbers up to 1000 - I can count in 50s	-I can represent, partition and place on a number line numbers to 1,000 - I can represent, partition and place on a number line numbers to 10,000 - I can find 1, 10, 100, 1,000 more or less - I can estimate on a number line to 10,000 - I can compare and order numbers to 10,000 - I can round to the nearest 10, 100 or 1,000	-I can represent, partition and place on a numberline numbers to 10,000, 100,000 and 1,000,000 - I can count forwards or backwards in steps of powers of 10 for any number up to 1,000,000 - I can count forwards and backwards in steps of 10s, 100s, 1,000s, 10,000s, and 100,000s - I can compare and order numbers to 100,000 - I can compare and order numbers to one million - I can round to the nearest 10, 100 or 1000 - I can round within 100,000 - I can round within 1,000,000	-I can read, write, order and compare numbers up to ten million and know the value of each digit - I can count forwards or backwards in steps of powers of 10 - I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers - I can recall prime numbers to 100 - I can round any integer

		-I can understand 14, 15, 16 -I can understand 17, 18, 19 -I can understand 20 -I can find 1 more and 1 less -I can understand the number line to 20 -I can use a number line to 20 -I can estimate on a number line to 20 -I can compare numbers to 20 -I can order numbers to 20 -I can count from 20 to 50 -I can understand 20, 30, 40 and 50 -I can count by making groups of tens -I can make groups of tens and ones -I can partition into tens and ones -I know the number line to 50 -I can estimate on a number line to 50 -I can find 1 more, 1 less	-I can count in 3s				
Number: Negative Numbers	N/A	N/A	IN/A	N/A	-I can count backwards through 0 including negative numbers	N/A	- I can use negative numbers in context and calculate intervals across zero

Number: Roman Numerals	N/A	N/A	N/A	N/A	-I can recognise Roman numerals to 100	-I can recognise Roman numerals to 1,000 and recognise years written in these	N/A
Calculations : Addition and Subtraction	-I can solve real world mathematical problems with numbers up to 5.	-I can use a Part-whole model -I can write number sentences -I know Fact families - addition facts - I know number bonds within 10 -I can be systematic with number bonds within 10 -I know number bonds to 10 -I understand addition as add together and add more -I can solve addition problems -I can find a part -I can understand subtraction as find a part -I can use Fact families for subtraction -I can understand subtraction as take away/crossing out (How many left?) -I can use a number line to subtract -I can add or subtract 1 or 2 -I can add by counting on within 20	-I know bonds to 10 -I can find fact families – addition and subtraction bonds within 20 -I can use related facts -I can find bonds to 100 (tens) -I can add and subtract 1s -I can add by making 10 -I can add three 1-digit numbers -I can add to the next 10 -I can add across a 10 -I can subtract across 10 -I can subtract from a 10 -I can subtract a 1-digit number from a 2-digit number (across a 10) -I can calculate 10 more, 10 less -I can add and subtract 10s -I can add two 2-digit numbers (not across a 10) -I can add two 2-digit numbers (across a 10)	-I can add and subtract 1s, 10s and 100s -I can add and subtract 1s across a 10 - I can add and subtract 10s across a 100 - I can add and subtract two numbers (no exchange) - I can add two numbers across 10/100 - I can subtract two numbers across 10/100 - I can add 2-digit and 3-digit numbers - I can subtract a 2-digit number from a 3-digit number - I can estimate answers - I can use inverse operations	-I can add and subtract 1s, 10s, 100s and 1,000s -I can add two 4-digit numbers (with no exchange, one exchange, more than one exchange) - I can subtract two 4-digit numbers (with no exchange, one exchange, more than one exchange) - I can recognise and use efficient subtraction methods -I can estimate answers - I can check using the inverse	-I can use mental strategies to add and subtract numbers - I can add whole numbers with more than 4 digits (using column method) - I can subtract whole numbers with more than 4 digits (using column method) - I can round to check answers - I can use inverse operations (addition and subtraction) - I can solve multi-step addition and subtraction problems - I can compare calculations - I can find missing numbers	-I can use formal written methods, add and subtract whole numbers with more than 4 digits - I can recognise and use square numbers and cube numbers, and the notation for square and cube -I can solve multi-step problems -I can use the order of operations correctly -I can use mental calculations and estimation - I can reason from known facts

		-I can add ones using number bonds -I can find and make number bonds to 20 -I can find doubles -I can find near doubles -I can subtract ones using number bonds -I can understand subtraction as counting back -I can understand subtraction as finding the difference -I can use related facts -I can solve missing number problems	-I can subtract two 2-digit numbers (not across a 10) -I can subtract two 2-digit numbers (across a 10) -I can solve mixed addition and subtraction problems -I can compare number sentences -I can solve missing number problems				
Calculations: Multiplication and Division	-I can solve real world mathematical problems e.g. Are there enough chairs around the table? Do we have enough plates/cups/biscuits, etc?	-I can find doubles Covered in Summer Term- to be updated	-I can count in 2s, 5s and 10s -I can count in 3s -I can recognise equal groups -I can make equal groups -I can add equal groups -I can introduce the multiplication symbol -I can write multiplication sentences -I can use arrays -I can make equal groups – grouping -I can make equal groups – sharing -I can know the 2 times-table	-I can use arrays to represent multiplication facts I can recall the multiples of 2, 5 and 10 I can make equal groups -I can multiply and divide by 3 - I can recall the 3 times tables -I can multiply and divide by 4 -I can recall the 4 times tables -I can multiply and divide by 8 -I can recall the 8 times tables	-I can recall multiples of 3 -I can multiply and divide by 6 - I can recall 6 times-tables and division facts -I can multiply and divide by 9 - I can recall 9 times-tables and division facts - I can recognise links between the 3,6- and 9-times tables - I can multiply and divide by 7 - I can recall 7 times-tables and division facts	-I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers - I can recall and use the vocabulary of prime numbers - I can recognise and use square numbers and cube numbers, and the notation for square and cube - I can multiply by 10, 100 and 1000 - I can divide by 10, 100 and 1000	- I can multiply up to a 4-digit number by a 2-digit number using the formal method of long multiplication - I can solve problems with multiplication - I can use short division to divide 4-digits by 1-digit -I can divide using factors - I can use long division to divide numbers with up to 4-digits by a 2-digit whole number and interpret any

			-I can divide by 2 -I can use doubling and halving -I can understand and identify odd and even numbers -I know the 10 times-table -I can divide by 10 -I know the 5 times-table -I can divide by 5 -I can find relationships between the 5 and 10 times-tables	-I can recall the multiples of 10 - I can use related calculations - I can reason about multiplication -I can multiply a 2-digit number by a 1-digit number (no exchange then with exchange) -I can link multiplication and division - I can divide a 2-digit number by a 1-digit number (no exchange, flexible partitioning and then with remainders) - I can use scaling - I can solve multiplication, simple division and missing number problems.	- I can recall 11 times-tables and division facts - I can recall 12 times-tables and division facts - I can multiply by 1 and 0 - I can divide a number by 1 and itself - I can multiply three numbers - I can recall and use factor pairs -I can multiply by 10 and 100 - I can divide by 10 and 100 - I can reca;ll and use informal written methods for multiplication - I can multiply a 2-digit number by a 1-digit number - I can multiply a 3-digit number by a 1-digit number - I can divide a 2-digit number by a 1-digit number -I can divide a 3-digit number by a 1-digit number - I can use efficient methods for multiplication	- I can recognise and find multiples of 10, 100 and 1,000 -I can use formal written methods, multiply up to 4-digits by both one- and two-digit numbers - I can solve problems with multiplication - I can use short division, divide a 4-digit number by a 1-digit number - I can divide with remainders and be able to explain them. - I can use efficient division method - I can solve problems with division	remainders appropriately -I can solve multi-step problems -I can use the order of operations correctly -I can use mental calculations and estimation - I can reason from known facts
Geometry: Shape and	-I can understand position through	Covered in Summer Term- to be updated	Covered in Summer Term- to be updated	N/A	-I can describe position	-I can describe position following a	-I can translate and reflect shapes

Position and Direction	words alone, e.g. "The bag is under the table," - with no pointing. -I can describe a familiar route. -I can discuss routes and locations, using words like 'in front of' and 'behind'				- I can draw and move on a grid - I can describe movement on a grid	reflection or translation - I can find and draw lines of symmetry - I can complete a symmetric figure	using all four quadrants
Geometry: Shape	-I can combine shapes to make new ones; an arch, a bigger triangle etc -I can talk about and identify the patterns around me, e.g. stripes on clothes, designs on rugs and wallpaper. -I can use informal language like 'pointy', 'spotty', 'blobs' etc -I can extend and create ABAB patterns, e.g stick, leaf, stick, leaf.	-I can recognise and name 3-D shapes -I can sort 3-D shapes -I can recognise and name 2-D shapes -I can sort 2-D shapes -I can identify patterns with 2-D and 3-D shapes	-I can recognise2-D and 3-D shapes -I can count sides on 2-D shapes -I can count vertices on 2-D shapes -I can draw 2-D shapes -I can recognise lines of symmetry on shapes -I can use lines of symmetry to complete shapes -I can sort 2-D shapes -I can count faces on 3-D shapes -I can count edges on 3-D shapes -I can count vertices on 3-D shapes -I can sort 3-D shapes -I can make patterns with 2-D and 3-D shapes	- I can make shapes - I can recognise and describe 2-D shapes - I can recognise, describe and make 3-D shapes -I can identify right angles in shapes and those that are less than a right angle - I can compare angles - I can identify horizontal/ vertical lines and pairs of parallel and perpendicular lines	-I can identify right angles in shapes - I can identify and compare the sizes of acute and obtuse angle - I can compare and order angles - I can recognise and describe 2-D shapes - I can compare and classify geometric shapes, including quadrilaterals and triangles based on properties and sizes - I can understand horizontal and vertical - I can identify lines of symmetry in 2D shapes in different orientations-complete drawings - I can complete a symmetric figure	-I can identify, compare and order angles -I can measure angles in degrees - I can measure with a protractor - I can draw lines and angles accurately -I can calculate angles on a straight line and around a point - I can calculate lengths and angles in shapes - I can recall that 360 degrees is a whole turn -I can match a net to its 3D shape	-I can recognise angles around a point, on a straight line or are vertically opposite - I can find missing angles of triangles, quadrilaterals and polygons - I can draw shapes accurately - I can draw nets of 3-D shapes

Fractions, Decimals and Percentages : Fractions	N/A	Covered in Summer Term- to be updated	Covered in Summer Term- to be updated	-I can understand the denominator of unit fractions - I can compare and order unit fractions - I can understand the numerators of non-unit fractions - I can understand the whole - I can compare and order non-unit fractions I can use fractions and scales -I can count in fractions on a number line -I can find equivalent fractions on a number line - I can show equivalent fractions as bar models -I can make a whole -I can recognise tenths as decimals -I can find fractions of a set of objects -I can compare and order fractions up to a whole -I can add and subtract fractions with the same denominator	-I can understand the whole - I can count beyond 1 - I can partition a mixed number - I can use number lines with mixed numbers - I can compare and order mixed numbers - I can understand improper fractions - I can convert mixed numbers to improper fractions - I can convert improper fractions to mixed numbers - I can place equivalent numbers on a number line - I can recall equivalent fraction families - I can add two or more fractions - I can add fractions and mixed numbers - I can subtract two fractions - I can subtract from whole numbers - I can subtract from mixed numbers	-I can find fractions equivalent to a unit fraction and to a non-unit fraction - I can recognise equivalent fractions - I can recognise mixed numbers and improper fractions and be able to convert from one to the other. - I can compare and order fractions less than and more than 1 - I can add and subtract fractions with the same denominator - I can add fractions within 1 and with a total greater than 1 -I can add to a mixed number - I can add two mixed numbers - I can subtract fractions - I can subtract from a mixed number - I can subtract two mixed numbers - I can multiply a unit fraction by an integer - I can multiply a non-unit fraction by an integer - I can multiply a mixed number by an integer	-I can find equivalent fractions and simplify - I can compare and order using denominators/numerators - I can add and subtract simple fractions - I can add and subtract any two fractions - I can add and mixed numbers - I can solve multi-step problems - I can multiply fractions by integers and fractions - I can divide any fraction by an integer - I can find the fraction of an amount - I can find the whole when answering questions about fractions of amounts

						- I can calculate a fraction of a quantity - I can find a fraction of an amount - I can find the whole - I can use fractions as operators	
Fractions, Decimals and Percentages : Decimals	N/A	N/A	Covered in Summer Term- to be updated	N/A	-I can recognise tenths as fractions and decimals -I can place and read tenths on a place value chart - I can place tenths on a number line - I can divide a 1-digit number by 10 - I can divide a 2-digit number by 10 - I can recognise hundredths as fractions and decimals - I can place and read hundredths on a place value - I can divide a 1- or 2- digit number by 100 - I can make a whole - I can compare and order decimals - I can round decimals - I can recognise and write decimal equivalents to ½ and ¼	-I can say, read and write decimals up to 2 d.p. -I can find equivalent fractions and decimals - I can recognise and write thousandths as fractions and decimals - I can place and read thousandths on a place value chart - I can order and compare decimals (same number of decimal places) - I can order and compare any decimals with up to 3 decimal places - I can round decimals to the nearest whole number - I can round to 1 decimal place - I can add and subtract decimals within 1 - I can add decimals – crossing the whole	-I can recall place value within 1 -I can round decimals - I can add and subtract decimals - I can multiply and divide by 10, 100 and 1,000. Know the value of each digit to three decimal places. - I can multiply decimals by integers - I can divide decimals by integers - I can multiply and divide decimals in context - I can find decimal and fraction equivalents - I can understand fractions as division

						- I can add decimals with the same/ different number of decimal places - I can subtract decimals with the same/ different number of decimal places - I can add and subtract wholes and decimals - I can multiply decimals by 10, 100 and 1,000 - I can divide decimals by 10, 100 and 1,000	
Fractions, Decimals and Percentages : Percentages	N/A	N/A	N/A	N/A	N/A	-I can show I understand percentages - I can write percentages as fractions -I can write percentages as decimals - I can find equivalent fractions, decimals and percentages	-I can understand percentages - I can convert fractions to percentages - I can find equivalent fraction, decimals and percentages - I can order fractions, decimals and percentages - I can find percentage of an amount (one step and then multi-step) -I can find missing values
Measurement: Time	-I am beginning to describe a sequence of events,	Covered in Summer Term- to be updated	Covered in Summer Term- to be updated	-I can recognise O'clock, half past,	-I can tell the time to 5 minutes and to the minute	-I can solve problems where I need to convert between	-I can solve problems involving the calculation and

	real or fictional, using words such as 'first', 'then...			quarter past and quarter to -I can recall the number of seconds in a minute, and the number of days in each month, year and leap year - I can state how many hours are in a day -I can tell the time to 5 minutes and to the minute - I can tell the time using an analogue clock and 12-hour clock - I can find and compare durations	-I can use a.m. and p.m. - I can read, write and convert between analogue and digital clocks, including 24 hour - I can solve problems involving conversion between hours to minutes, minutes to seconds, years to months and weeks to days	units of time.	conversion of units of measure, using decimal notation up to three places if I need to -I can use, read, write and convert between standard units. - I can convert between measurement of length, mass, and time from a smaller unit to a larger unit and vice versa. I can do this using decimal notation up to three decimal places
Measurement: Money	N/A	Covered in Summer Term- to be updated	-I can count money - pence -I can count money - pounds (notes and coins) -I can count money- pounds and pence -I can choose notes and coins -I can make the same amount -I can compare amounts of money -I can calculate with money -I can make a pound -I can find change -I can solve two-step problems	-I can count pence - I can count pounds -I can convert pounds and pence - I can add and subtract money, giving change in £ and p	-I can order and estimate money - I can estimate money - I can convert pounds and pence - I can add and subtract money, giving change when necessary	-I can use all four operations to solve problems involving measure	-I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three places if I need to

Measurement: Mass	-I can make comparisons between objects relating to size, length, weight and capacity.	-I can understand heavier and lighter -I can measure mass -I can compare mass	-I can measure in centimetres -I can measure in metres -I can compare lengths and heights -I can order lengths and heights -I can use the four operations with lengths and heights	-I can use scales -I can measure mass in grams and kilograms -I can find equivalent masses -I can compare mass -I can add and subtract mass	-I can convert different units of measurement e.g. I can convert kilometers into meters or hours into minutes -I can estimate, compare and calculate different measures	-I can convert between similar units of metric measure - I can convert from metric to imperial units (giving the rough equivalent)	-I can convert between units of measure: weight - I can calculate with metric measures -I can recall and convert imperial measures
Measurement: Capacity and Volume	make comparisons between objects relating to size, length, weight and capacity.	-I can understand full and empty -I can compare volume -I can measure capacity -I can compare capacity	-I can compare volume and capacity -I can measure in millilitres -I can measure in litres -I can use the four operations with volume and capacity	-I can measure capacity and volume in liters and milliliters -I can find equivalent capacities and volumes -I can compare capacity and volume -I can add and subtract capacity and volume	-I can convert different units of measurement -I can estimate, compare and calculate different measures	-I can convert between similar units of metric measure - I can convert from metric to imperial units (giving the rough equivalent)	-I can convert between units of measure - I can calculate with metric measures -I can recall and convert imperial measures - I can find volume counting cubes -I can find the volume of a cuboid
Measurement: Length and Height	-I can make comparisons between objects relating to size, length, weight and capacity.	-I can compare lengths and heights -I can measure length using objects -I can measure length in centimetres	-I can compare mass -I can measure in grams -I can measure in kilograms -I can use the four operations with mass	-I can measure in meters, centimeters and millimeters -I can recognise and find equivalent lengths (m & cm, mm & cm) -I can compare lengths - I can add lengths	-I can measure in kilometers and meters - I can find equivalent lengths - km and m	-I can convert between similar units of metric measure - I can convert from metric to imperial units (giving the rough equivalent)	-I can convert between units of measure: distance. - I can calculate with metric measures -I can recall and convert imperial measures

				- I can subtract lengths			
Measurement: Area and Perimeter	N/A	N/A	N/A	-I can measure perimeter - I can calculate perimeter	-I can understand what area is - I can find the area of straight-sided shapes by counting squares - I can compare areas- I can find perimeter on a grid - I can find the perimeter of a rectangle - I can find the perimeter of rectilinear shapes - I can find the missing lengths of rectilinear shapes - I can calculate the perimeter of rectilinear shapes - I can find perimeter of regular polygons - I can find perimeter of polygons	-I can find the perimeter of rectangles -I can find the perimeter of rectilinear shapes -I can find the perimeter of polygons -I can find the area of rectangles -I can find the area of compound shapes - I can estimate area	-I can recognise that shapes with the same area can have a different perimeter and vice versa - I can calculate area and perimeter - I can calculate the area of a triangle (counting squares) - I can calculate the area of a right-angled triangle - I can calculate the area of any triangle - I can calculate the area of a parallelogram
Statistics	N/A	N/A	-I can understand temperature Covered in Summer Term- to be updated	-I can make tally charts -I can draw and interpret pictograms (2, 5 and 10) - I can interpret and present data using bar charts and tables -I can solve one and two step questions using information in	-I can interpret and present discrete and continuous data in various ways, including bar charts and time graphs -I can solve comparison, sum and difference problems using information presented in bar charts, pictograms,	-I can draw line graphs -I can read and Interpret line graphs - I can read and interpret tables - I can read and interpret two-way tables - I can read and interpret timetables	-I can read, interpret and draw line graphs - I can read and interpret dual bar charts - I can read and interpret pie charts - I can read and interpret pie charts with percentages

				scaled bar charts, pictograms and tables	tables and other graphs -I can begin to interpret line graphs		- I can draw pie charts - I can calculate the mean
Ratio and Proportion	N/A	N/A	N/A	N/A	N/A	N/A	-I can recognise when to add or multiply - I can use ratio language - I can use and understand the ratio symbol - I can use scale drawing - I can calculate scale factors - I can solve problems involving similar shapes where the scale factor is known or can be found - I can solve ratio and proportion problems
Algebra	N/A	N/A	N/A	N/A	N/A	N/A	-I can use 1-step function machines - I can use 2-step function machines - I can form expressions - I can use substitution - I can use formulae - I can form equations - I can solve 1-step equations

							- I can solve 2-step equations - I can find pairs of values - I can solve problems with two unknowns