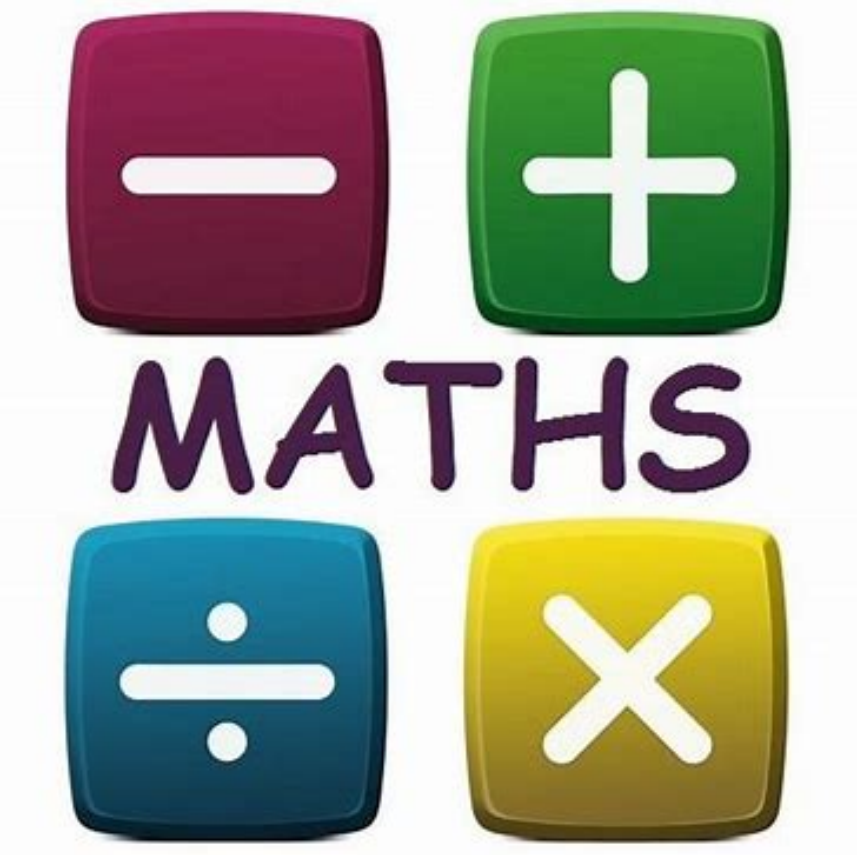
St. Thomas'
CofE PRIMARY ACADEMY
Learning for life with Jesus



Mathematics Curriculum

Maths Curriculum Document

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Maths Intent, Implementation and Impact

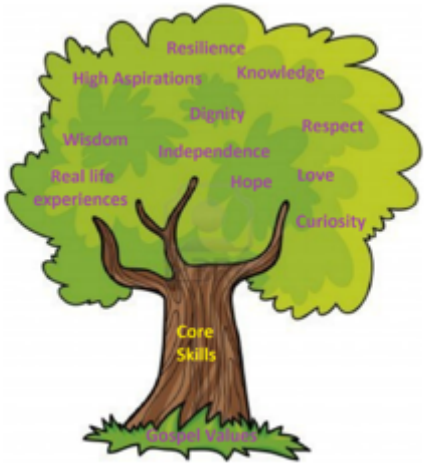
Learning for Life with Jesus

Intent

As a Church of England school, our Maths curriculum is underpinned by our gospel values. These values are used and applied throughout the Maths curriculum. Our children are learned and wise in the way that they practise and apply skills in a variety of different contexts and apply these skills to real-life contexts, problem solving and reasoning. They show curiosity, attentiveness and active learning through their independence within lessons, following their own learning journey, taking charge of their own learning by using a variety of resources and acting on their 'pink pen' feedback, through active marking within each lesson. Our gospel values create a solid moral background for our children and encourage them to become better members of society, with self-belief and aspirations.

The main aim of our Maths curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience, so that they are fully prepared for the future. These skills are progressive and are built on year after year from EYFS all the way through to Year 6. This ensures that children are given opportunities to practise and apply Maths skills in different contexts and make good progress in all areas. By adopting a Mastery approach (following White Rose Maths), it is also intended that all children, regardless of their starting point, will maximise their academic achievement and leave our school with an appreciation and enthusiasm for Maths, resulting in a lifelong positive relationship with number.

We want our pupils to become fluent in the fundamentals of mathematics, to be able to reason and to solve problems. Our curriculum embraces these National Curriculum aims, and provides guidance to help pupils to become visualisers (through a CPA approach), describers (clear focus on mathematical talk and language) and experimenters (becoming fluent in maths).



Our gospel values, core skills and key outcomes will raise aspirations and ensure that our children are more than ready for the next stage in their Maths journey.

Implementation

Our Maths curriculum aims to ensure that:

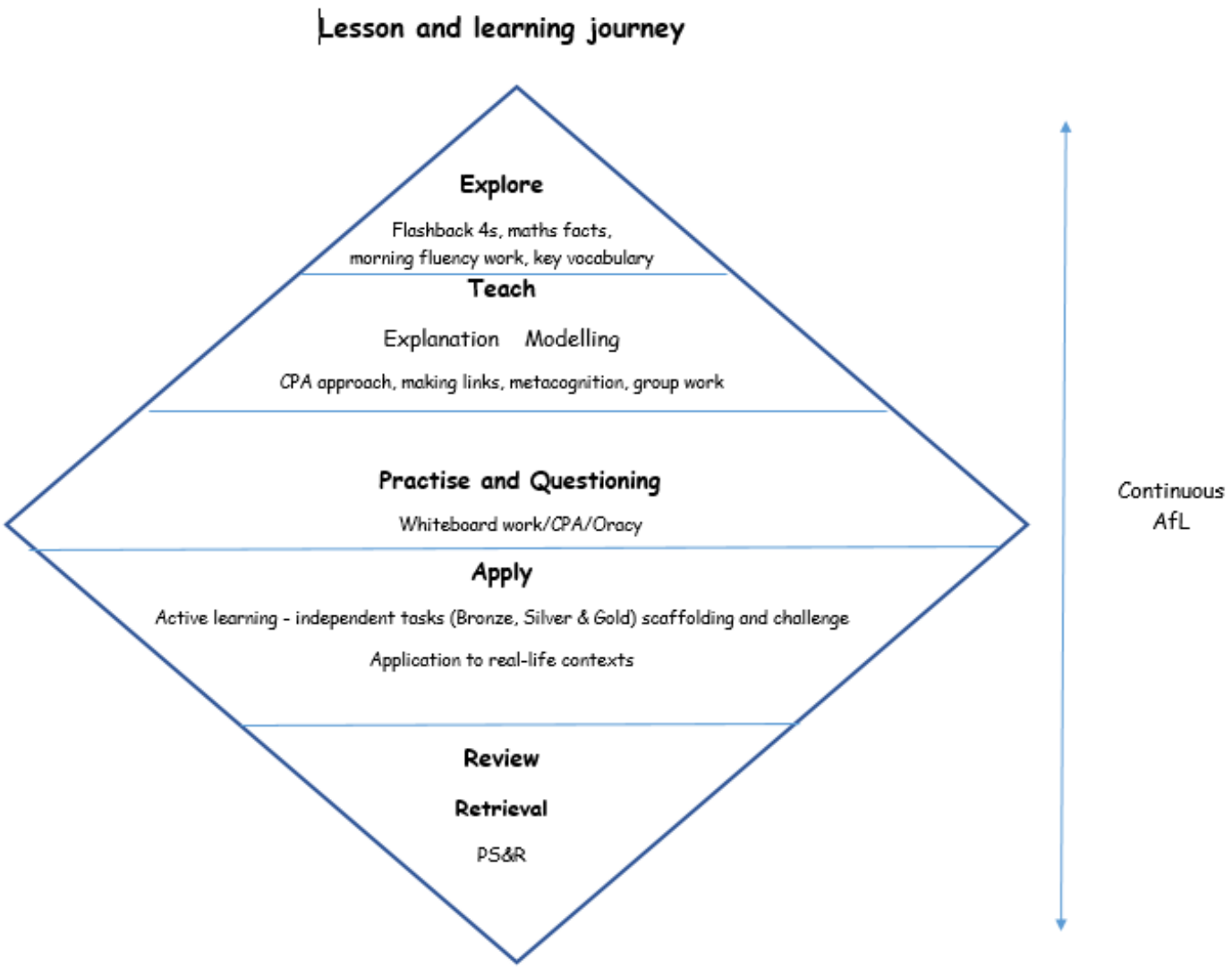
- There is a progression of maths skills across the school
- Children are taught and practice the 'most efficient' methods of calculation
- We provide meaningful, stimulating learning experiences using the children's real life experiences as much as possible
- We inspire children to confidently recall and use their mathematical knowledge and skills
- Teaching staff model a high standard of problem solving to secure high expectations
- We provide a language-rich environment that promotes a use of correct mathematical terminology
- Pupils are provided with a range of opportunities to apply key mathematical skills, across different contexts to develop mastery. Including the use of the Concrete, Pictorial and Abstract (CPA) approach.

Lessons are planned and sequenced so that new knowledge and skills build on what has been taught before. Teachers follow the White Rose Maths blocks, creating learning journeys of multiple small steps. Each learning journey has a problem solving and reasoning objective for each small step, allowing all children to access a mastery curriculum. Staff also refer to the Calculation Policy when teaching formal methods, understanding that sometimes children find their own efficient methods along the way.

Maths is taught for 45 minutes per day in KS1 and 1 hour per day in KS2. EYFS have two maths mornings per week and then have group tasks and continuous provision opportunities for maths throughout the rest of the week.

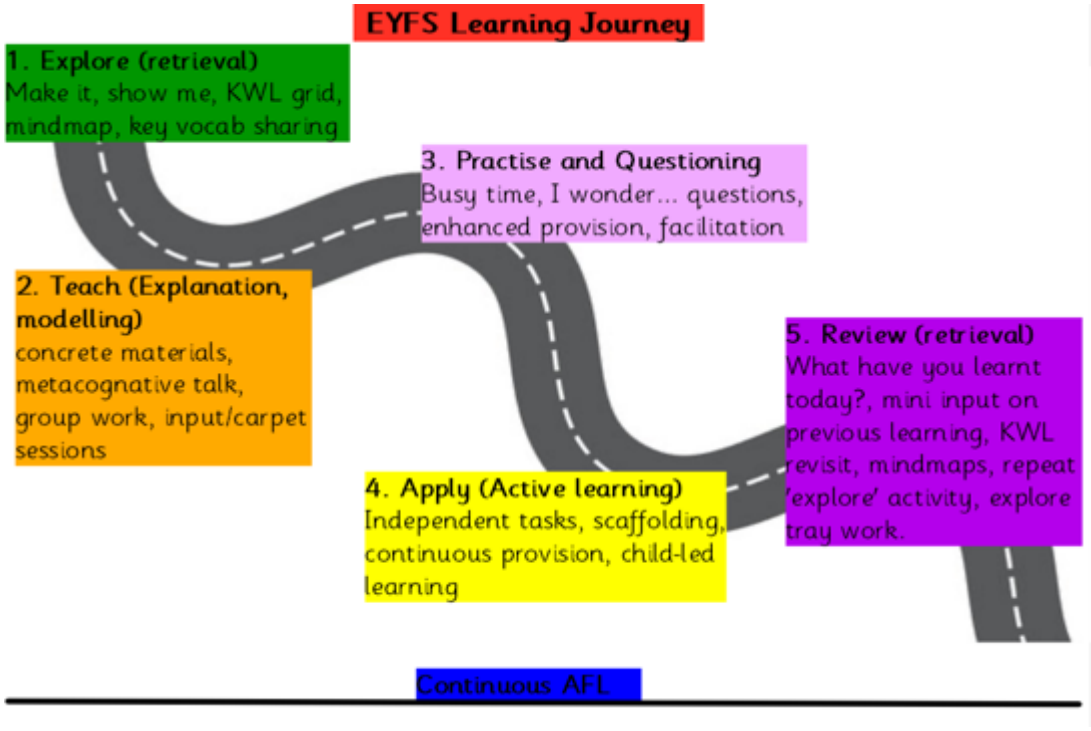
Lessons start with an arithmetic warm up and/or 'Flashback 4' which allows them to revisit learning from that week, previous topics and previous years. An AfL task is used to assess the children's level of understanding for each small step and this information is used to allocate the children to the appropriate activity for the lesson. Activities are differentiated as Bronze, Silver or Gold. Throughout each small step, children have the opportunity to learn through the CPA approach (where appropriate) and active learning. Assessment and feedback will be given throughout the lesson, verbally and through 'pink pen' marking, which will focus on misconceptions and next steps for learning. Challenges are provided for all children in each lesson and these mostly focus on application style questions and/or problem solving and reasoning activities. Lessons and blocks then end with a review that focus on the key learning from that session and end of block assessments.

Each lesson follows the following sequence:



EYFS

Foundation Stage introduce number to the children focusing on number names, formation and ordering. The children then progress on to one and two digit calculations involving addition and subtraction using number lines and concrete objects. With apparatus, the children explore halving and doubling and children learn the names and properties of shapes. The foundation stage follow the journey in the following sequence:



In Maths, work is recorded in an exercise book and marked in line with the marking policy.

Impact

The impact of the Mathematics emphasis and teaching at St Giles' & St George's:

A mathematical concept or skill has been mastered when a child can show it in multiple ways:

-using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

- Children demonstrate quick recall of facts and procedures. This includes the recollection of the times tables.
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Children show confidence in believing that they will achieve.
- Children show a high level of pride in the presentation and understanding of the work.

At St Giles' & St George's we expect that by the end of Y6 our children will:

Become fluent in the fundamentals of mathematics.

Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations.

Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

Mathematics Overview

	Autumn Term	Spring Term	Summer Term
Nursery	Uses some number names in play Counting in every day contexts Number rhymes React to changes in amounts saying 'lots', 'more', 'same', 'different' Compare sizes, weights Notice patterns and arrange Begin to show an interest in representing number – tracing numbers with fingers etc Begin to show an interest in numerals in the environment Begin to recite numbers in order to 5 Talk about and identify numbers & numerical patterns around them	Begin fast recognition of up to 3 objects (subitising) Say 1 number for each item in order 1 – 5 Show finger numbers to 5 Link numerals to amounts Experiment with their own symbols and marks Solve real world maths problems with numbers up to 5 Compare quantities using language more / fewer than Talk about and explore 2D using informal and mathematical language Understand position through words alone Make comparisons between objects relating to size, length and capacity Select shapes appropriately and combine shapes to make new ones Begin to describe a sequence of events	Subitising Recite numbers past 5 Talk about and explore 2D and 3D shapes Describe and discuss familiar routes and locations Make comparisons between objects relating weight Notice and correct errors in repeating patterns Begin to describe a sequence of events using words like first, then, next Understand that anything can be counted, not just objects e.g. claps, steps etc To know that a given number can be made by adding different amounts together, up to 5 e.g. 1 and 4
Reception	Match and sort Compare amounts, size, mass and capacity Exploring pattern Representing, comparing and composition of 1, 2 & 3 Circles and triangles Positional language Presenting numbers to 5 One more one less Shapes with 4 sides Time	Introducing zero Comparing numbers to 5 Composition of 4 & 5 Comparing mass and capacity 6 , 7 & 8 Making pairs Combining two groups Length and height Time 9 & 10 Comparing numbers to 10 Bonds to 10 3D shape Pattern	Building numbers beyond 10 Counting patterns beyond 10 Special reasoning Match, rotate and manipulate Adding more and taking away Compose and decompose Doubling Sharing & grouping Even and odd Visualise and build Deepening understanding Patters and relationships Mapping
Year 1	Number: Place Value (within 10) Number: Addition and Subtraction (within 10) Geometry: Shape	Number: Place Value within 20 Number: Addition and Subtraction (within 20) Number: Place Value (within 50) Measurement: Length and Height Measurement: Mass and Volume	Number: Multiplication and Division Number: Fractions Number: place value within 100 Measurement: Money and Time
Year 2	Number: Place Value Number: Addition and Subtraction Geometry: Properties of Shape	Number: Multiplication and Division Measurement: Money; length and height; mass, capacity and temperature	Number: Fractions Position and Direction Measurement: Time Statistics

LKS2 (Y3/ 4)	Number: Place Value Number: Addition and Subtraction Number: Multiplication and Division	Number: Multiplication and Division Measurement: Length, Perimeter and Area Number: Fractions and decimals Measurement: Mass and Capacity	Number: Decimals (including money) Measurement: Time Statistics Geometry: Properties of shape
Year 5	Number: Place Value Number: Four operations Number: Fractions	Number: Multiplication and division Number: Fractions, Decimals & Percentages Measurement: Perimeter and area Statistics	Number: Decimals and negative numbers Geometry: Properties of Shape Geometry: Position and Direction Measure: Converting units and volume
Year 6	Number: Place Value Number: Four operations Number: Fractions Measurement: Converting units	Number: ration, algebra, decimals, fractions, percentages, Measure: area, perimeter and volume Statistics	Geometry: shape Geometry: position and direction Consolidation work and themed projects involving problem solving

Core Skills Overview

	Addition	Subtraction	Multiplication	Division	Fractions	Percentages
Reception	Link the number symbol (numeral) with its cardinal number value. Count beyond ten. Compare numbers. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. Automatically recall number bonds for numbers 0–5 and some to 10. Subitise					
Year 1	a) Count forwards across 100 from any given number b) Add one digit and two digit numbers to 20	a) Count backwards across 100 from any given number b) Subtract one digit and two digit numbers to 20			a) Find half of a quantity b) Find quarter of a quantity	
Year 2	a) Count forwards in steps of 2,3,5 from 0 b) Count forwards in tens from any number c) Add a two-digit and one-digit number mentally (up to 100) d) Add a two-digit and tens mentally (up to 100) e) Add two two-digit numbers mentally (up to 100) f) Add three one-digit numbers mentally (up to 100)	a) Count backwards in tens from any number b) Subtract a two-digit and one-digit number mentally (up to 100) c) Subtract a two-digit and tens mentally (up to 100) d) Subtract two two-digit numbers mentally (up to 100)	a) Use multiplication facts for the 2, 5 and 10 multiplication tables	Use division facts for the 2, 5 and 10 multiplication tables	a) Find one third of a quantity b) Find two quarters of a quantity c) Find three quarters of a quantity	
Year 3	a) Add multiples of 10 or 100 to a number (up to 999) b) Add numbers up to 3 digits using formal method of column addition	a) Subtract multiples of 10 or 100 from a number (up to 999) b) Subtract numbers up to 3 digits using formal method of column subtraction	a) Multiply a two digit by a one digit using mental methods and progressing to formal written methods (2, 3, 4, 5 and 8) b) Multiply a whole number by 10 c) Multiply more than two numbers together (2, 3, 5, 5 and 8)	a) Use known multiplication facts to create associated division facts b) Divide one or two digit numbers by 10	a) Add and subtract fractions with the same denominator within one whole b) Find fractions of quantities (up to 100) where the denominator is 2, 3, 4, 5, 8 or 10.	
Year 4	a) Add multiples of 10, 100 and 1,000 to a number (up to 9,999) b) Add numbers up to 4 digits using formal method of column addition c) Add with decimals (up to tenths and hundredths)	a) Subtract multiples of 10, 100 and 1,000 from a number (up to 9,999) b) Subtract numbers up to 4 digits using formal method of column subtraction c) Subtract with decimals (up to tenths and hundredths)	a) Multiply 2 and 3 digit numbers by a 1-digit number using a formal written method b) Multiply a whole number by 100 c) Multiply more than two numbers together	a) Use known multiplication facts to create associated division facts b) Divide one or two digit numbers by 100 c) Divide multiples of 10, 100 and 1,000 by a single digit number using associated division facts	a) Add and Subtract fractions where the answer may be an improper fraction b) Find fractions of quantities using known multiplication facts	

Core Skills Overview

	Addition	Subtraction	Multiplication	Division	Fractions	Percentages
Year 5	a) Add multiples of 10, 100, 1,000, 10,000 and 100,000 to a number (up to 999,999) b) Add numbers with more than 4 digits using formal method of column addition c) Add decimals (where two numbers have a different number of decimal places eg 14.7 + 8.65) d) Apply knowledge of partitioning with numbers up to 1,000,000	a) Subtract multiples of 10, 100, 1,000, 10,000 and 100,000 from a number (up to 999,999) b) Subtract numbers with more than 4 digits using formal method of column subtraction c) Subtract decimals (where two numbers have a different number of decimal places eg 14.7 - 8.65)	a) Multiply a 3-digit number by a 2-digit number using formal method of long multiplication b) Multiply whole numbers by 10, 100 and 1,000 (where the answer is no greater than 999,999) c) Multiply decimal numbers by 10, 100 and 1,000 where the quotient may be a decimal d) Recognise and use square and cube numbers e) Multiply multiples of 10 by 10, 100 or 1,000 (e.g. 30 x 400)	a) Divide numbers up to 4 digits by a 1-digit number using the formal written method of long division (recording with a remainder where required) b) Divide whole numbers by 10, 100 and 1,000 (where the quotient contains a decimal and the dividend may contain a decimal)	a) Add fractions with the same denominators and convert the answer from improper fractions to mixed numbers b) Add and subtract fractions where there are different denominators and one fraction is a multiple of the other (and one fraction may be a mixed number) c) Multiply proper fractions and mixed numbers by whole numbers d) Find fractions of quantities using formal calculation strategies	a) Find 10% of a number b) Find a multiple of 10% of a number c) Find 5% of a number
Year 6	a) Add multiples of 10, 100, 1,000, 10,000, 100,000 and 1,000,000 to a number (up to 9,999,999) b) Add and subtract using negative numbers through zero c) Use BIDMAS to identify the correct order of operations	a) Subtract multiples of 10, 100, 1,000, 10,000, 100,000 and 1,000,000 from a number up to 9,999,999)	a) Multiply a 4-digit number by a 2-digit number using the formal method of multiplication b) Multiply one digit numbers with up to two decimal places by whole numbers c) Multiply a tenths number that is less than one by a multiple of 10 or 100 (e.g. 0.4 x 60) d) Multiply a number with decimals by a two digit number using the formal method of long multiplication (e.g. 5.1 x 28)	a) Divide numbers up to 4 digits by a 2-digit number using the formal written method of long division (where the dividend may include a fraction) b) Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division (where the dividend may include a fraction)	a) Add and subtract fractions with different denominators (using two or three fractions) b) Add and subtract a mixed number to a fraction where there are different denominators c) Multiply pairs of proper fractions writing the answer in its simplest form Divide proper fractions by whole numbers	a) Find a multiple of 5% of a number b) Find 1% of a number Find a multiple of 1% of a number

KPI Coverage: EYFS

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Birth to 3 Take part with number rhymes Compare amounts saying lots, more or same Count in everyday contexts sometimes skipping numbers React to changes in amounts in a group of objects **End of Nursery** Counts to 10 Uses number names accurately up to 10 Compares 2 groups of objects and knows how many objects are in a set (up to 10) Realises that not only objects can be counted (e.g stamps, claps) Matches numerals and quantities (up to 5) Recognises some numbers of personal significance. Counts an irregular arrangement of objects up to 10 (touch counting) Represent numbers using marks on paper or pictures **End of Reception - Expected (ELG)** Count reliably with numbers from 1 to 20 Count objects by sight (without touching) up to 20 Correctly form (and orientate) numerals to 10 Place numbers (within 20) in order	**End of Nursery** Uses the language of more and less **End of Reception - Expected (ELG)** Say which number is one more and one less than a given number up to 20 Add and subtract two single digit numbers using objects and quantities.	**End of Reception - Expected (ELG)** Solve problems, including doubling, halving and sharing.		**Birth to 3** Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'. **End of Nursery** Make comparisons between objects relating to size, length, weight and capacity **End of Reception - Expected (ELG)** Order two or three items by length or height Order two items by weight	**Birth to 3** Complete inset puzzles Climb and squeeze into different spaces **End of Nursery** Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', corners'; 'straight', 'flat', 'round'. Select shapes appropriately. Combine shapes to make new ones **End of Reception - Expected (ELG)** Name and recognise 3D shapes – cube, cuboid, sphere, cylinder and cone. Recognise and name 2D shapes – square triangle rectangle circle.	**Birth to 3** Complete or arrange patterns **End of Nursery** Understand position through words alone and describe familiar routes. Discuss routes and locations Talk about and identify simple patterns Notice and correct errors in repeated patterns **End of Reception - Expected (ELG)** Create simple patterns	**End of Nursery** Separates groups of objects in different ways **End of Reception - Expected (ELG)** Sort objects into groups based on their characteristics.

KPI Coverage: Year 1

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Counts to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Counts, reads and writes numbers to 100 in numerals; counts in multiples of twos, fives and tens. Given a number, identifies one more and one less Read and write numbers from 1 to 20 in numerals and words	Represents and uses number bonds and related subtraction facts within 20. Add and subtract one-digit and two-digit numbers to 20, including zero Solve one-step problems that involve addition and subtraction	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Recognises, finds and names a half as one of two equal parts of an object, shape or quantity Recognises, finds and names a quarter as one of four equal parts of an object, shape or quantity	Compares, describes and solves practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]; Compares, describes and solves practical problems for mass/weight [for example, heavy/light, heavier than, lighter than]; Compares, describes and solves practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]; Compares, describes and solves practical problems for time [for example, quicker, slower, earlier, later]. Tells the time to the hour and half past the hour and draws the hands on a clock face to show these times.	Recognises and names common 2-D and 3-D shapes	Describe position, direction and movement including whole, half, quarter and three-quarter turns	

KPI Coverage: Year 2

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Counts in steps of two, three, and five from 0, and in tens from any number, forward and backward Partition two digit numbers into different combinations of tens and ones Compares and orders numbers from 0 up to 100 and can use < > and = correctly. Uses place value and number facts to solve problems Read and write numbers to at least 100 in numerals and words	Solves problems with addition and subtraction by using concrete objects and pictorial representations, including those involving numbers, quantities and measures Solves problems with addition and subtraction by applying an increasing knowledge of mental and written methods. Can check answers are reasonable by using inverse operations and estimation Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Recalls and uses multiplication and division facts for the two, five and 10 multiplication tables, including recognising odd and even numbers Solves problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Recognises, finds, names and writes fractions 1/3, 1/4, 2/4, 1/2 and 3/4 of a length, shape, set of objects or quantity Recognise the equivalence of 2/4 and 1/2	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit Compare and order lengths, mass, volume/capacity Read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Use different coins to make the same amount Solves simple problems in a practical context involving addition and subtraction of money of the same unit including giving change Know the number of minutes in an hour and the number of hours in a day	Compares and sorts common 2- D and 3-D shapes and everyday objects using knowledge of their properties Identify and describe the properties of 2D shapes including the number of sides, line of symmetry Identify and describe the properties of 3D shapes including number of edges, vertices and faces	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line, and distinguishes between rotation as a turn and in terms of right angles for quarter, half and three- quarter turns (clockwise and anti-clockwise)	Asks and answers questions about totalling and comparing categorical data Interpret and construct simple pictograms, tally charts, bock diagrams and simple tables

KPI Coverage: Year 3

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Can find 10 or 100 more or less than a given number Recognises the place value of each digit in a three-digit number (hundreds, tens, and ones) Compare and order numbers up to 1000 Read and write numbers up to 1000 in numerals and words Count from 0 in multiples of 4, 8, 50 and 100	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Add and subtract mentally including 3 digit numbers with ones, tens and hundreds Estimate the answer to a calculation and use the inverse to check	Recalls and uses multiplication and division facts for the multiplication tables three, four and eight Calculates using the multiplication tables that are known including for two-digit numbers times one digit numbers using mental and progressing to formal written methods	Counts up and down in tenths; recognises that tenths arise from dividing an object into 10 equal parts and in dividing one- digit numbers or quantities by 10 Recognises, finds and writes fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Recognises and shows, using diagrams, equivalent fractions with small denominators Add and subtract fractions with the same denominator within one whole Compare and order unit fractions with the same denominator	Measures, compares, adds and subtracts lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Tells and writes the time from an analogue clock and 12-hour and 24-hour clocks Measure the perimeter of simple 2-D shapes Know the number of seconds in a minute and the number of days in each month, year and leap year	Identifies right angles, recognises that two right angles make a half-turn, three make three quarters of a turn and four a complete turn Identifies whether angles are greater than or less than a right angle Recognise 3D shapes in different orientations		Interprets and presents data using bar charts, pictograms and tables Solve one-step and two-step problems using information presented in scaled bar charts, pictograms and tables

KPI Coverage: Year 4

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Counts backwards through zero to include negative numbers Orders and compares numbers beyond 1,000 Rounds any number to the nearest 10, 100 or 1,000 Read Roman numerals to 100 (I to C) Count in multiplies of 6, 7, 9. 25 and 1000	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Solves addition and subtraction two-step problems in context, deciding which operations and methods to use and why	Recalls multiplication and division facts for multiplication tables up to 12 x 12 Multiply two-digit and three-digit numbers by a one-digit number using formal written layout Recognise and use factor pairs	Recognises and shows, using diagrams, families of common equivalent fractions Counts up and down in hundredths; recognises that hundredths arise when dividing an object by 100 and dividing tenths by 10 Rounds decimals with one decimal place to the nearest whole number Solves simple measure and money problems involving fractions and decimals to two decimal places Compares and orders numbers with the same number of decimal places up to 2 decimal places. Recognise and write decimal equivalents to ¼, ½, ¾ Add and subtract fractions with the same denominator	Converts between different units of measure eg kilometre to metre; hour to minute Measure and calculate the perimeter of a rectilinear figure Estimate, compare and calculate different measures, including money in pounds and pence Read, write and convert time between analogue and digital 12 and 24 hour clocks Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days	Compares and classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Complete a simple symmetric figure with respect to a specific line of symmetry Identify acute and obtuse angles and compare and order angles up to two right angles by size Identify lines of symmetry in 2D shapes presented in different orientations	Plots specified points and draws sides to complete a given polygon Describes positions on a 2D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down	Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs Interpret and present discrete and continuous data using appropriate graphical methods

KPI Coverage: Year 5

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 Read, write, order and compare numbers to at least 1,000,000 Interpret negative numbers in context Read Roman numerals to 1000 (M) and recognise years written in Roman numerals	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Add and subtract whole numbers with more than 4 digits, including using formal written methods Add and subtract numbers mentally with increasingly larger numbers	Identifies multiples and factors including finding all factor pairs of a number and common factors of two numbers Solves problems involving multiplication and division Apply knowledge factors and multiples, squares, cubes and primes. Long multiplication for three digit numbers by two digit numbers Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Solve problems involving multiplication and division, including scaling by simple fractions	Compares and orders fractions whose denominators are all multiples of the same number Reads and writes decimal numbers as fractions Recognise mixed number and improper fraction and convert one form to another Solves problems which require knowing percentage and decimal equivalents Multiply proper fractions and mixed numbers by whole numbers Recognise the per cent symbol and write percentages as a fraction with denominator of 100 and as a decimal	Converts between different units of metric measure (eg kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 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 (cm^2) and square metres (m^2) Solve problems involving converting between units of time	Identify: (i) angles at a point and one whole turn (total 360°) (ii) angles at a point on a straight line and half a turn (total 180°) (iii) other multiples of 90° Identify 3D shapes from 2D representations Estimate and compare acute, obtuse and reflex angles Use the properties of rectangles to deduce related in facts and find missing lengths and angles Distinguish between regular and irregular polygons	Identify, describe and represent the position of a shape following a reflection or translation and know that the shape has not changed	Solve comparison, sum and difference problems using information presented in a line graph Complete, read and interpret information in tables, including timetables

KPI Coverage: Year 6

Number and Place value	Addition and subtraction	Multiplication and division	Fractions	Measurement	Properties of Shape	Position and Direction	Statistics
							
Round any whole number to a required degree of accuracy Read, write, order and compare numbers up to 10,000,000 Uses negative numbers in context and calculates intervals across zero	Solve addition and subtraction multi-step problems in context Solve problems involving addition, subtraction, multiplication and division Perform mental calculations including with mixed operations and large numbers	Multiplies multi-digit numbers up to four digits by a two digit whole number using the formal written method of long multiplication Divides numbers up to four digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context Use their knowledge of the order of operations to carry out calculations involving the four operations Identify common factors, multiples and prime numbers Multiple and divide numbers by 10, 100 and 1000 giving answers up to three decimal places	Solve problems involving percentages and fractions of amounts in context (including inverse and measures) Recalls and uses equivalences between simple fractions, decimals and percentages, including in different contexts Compare and order fractions including those greater than 1 Add and subtract fractions with different denominators and mixed numbers Multiple fractions by both fractions and integers Divide proper fractions by whole numbers	Uses, reads, writes and converts between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Calculate the area of parallelograms and triangles Recognise when it is possible to use formulae for area and volume of shapes	Compares and classifies geometric shapes based on their properties and sizes and finds unknown angles in any triangles, quadrilaterals and regular polygons Draw 2-D shapes using given dimensions and angles Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	Draws and translates simple shapes on the coordinate plane and reflects them in the axes Describes positions on the full coordinate grid (all four quadrants)	Interprets pie charts and line graphs and uses these to solve problems Calculates and interprets the mean as an average

Y1 Maths
Learning Journey

	Objectives
	EXS
1	I can count up to and over 100 and back again
2	I can count, read and write numbers to 100. I can also skip count in two, fives and tens
3	I can find out what is one more or one less than a number
4	I can use my number bonds and subtract with numbers less than 20
5	I can find halves using objects, shapes and numbers
6	I can solve problems that involve measuring length and height
7	I can solve problems that involve measuring weight
8	I can solve problems that involve measuring capacity and volume
9	I can solve problems that involve time
10	I can tell the time to the hour and half hour and draw the hands on a clock face to show this
11	I can identify 2-D shapes and name them
12	I can identify 3-D shapes and name them
	GDS
	Apply my mathematical skills to different contexts.
	Cope with reasoning and deeper thinking mathematical problems.
	Solve a one-step problem involving addition and subtraction.

Y2 Maths
Learning Journey

	Objectives
	EXS
1	I can skip count in steps of two, three and five from zero. I can also skip count in tens from any number backwards and forwards.
2	I can partition numbers into tens and ones in different ways
3	I can put numbers in order from smallest to largest using the correct symbols (<, >, =). I can also compare numbers.
4	I can use what I know about place value and number to solve problems
5	I can solve addition and subtraction problems that involve numbers and measures. I can use Dienes and other objects to help
6	When solving addition and subtraction problems, I can use different strategies to help me
7	I can check my answers by estimating and using the inverse operation
8	I know my two, five and ten times tables. I also know the division facts linked to them. I also know my odd and even numbers
9	I can solve multiplication and division problems using different strategies and resources to help me (arrays, counters…)
10	I can find: 1/3, 1/4, 2/4, 1/2 and 3/4 of a length, shape or number
11	I can estimate and measure length, height, mass, temperature, capacity and length. I use the correct units when recording.
12	I am able to read scales when all the numbers on the scale are given
13	I can tell the time to the nearest five minutes as well as quarter past and quarter to. I can draw hands on a clock face to show this.
14	I can use different coins to make the same amount of money
15	Solves simple problems in a practical context involving addition and subtraction of money of the same unit including giving change
16	Compares and sorts common 2D and 3D shapes and everyday objects using knowledge of their properties
17	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line, and distinguishes between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
18	Asks and answers questions about totalling and comparing categorical data
	GDS
1	read scales where not all numbers on the scale are given and estimate points in between
2	recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts
3	use reasoning about numbers and relationships to solve more complex problems and explain their thinking
4	solve unfamiliar word problems that involve more than one step
5	read the time on a clock to the nearest 5 minutes
6	describe similarities and differences of 2-D and 3-D shapes, using their properties

Y3 Maths
Learning Journey

	Objectives
	EXS
1	I can find 10/100 more or less than a number
2	I know the place value facts of a number (hundreds, tens and ones)
3	I can use my number and place value skills to solve problems
4	I can read and write numbers up to 1000 using digits and words
5	I can add and subtract with numbers up to 1000 using the column method
6	I know my three, four and eight times tables and the division facts that are linked to them
7	I can multiply a two digit number by a one number using the times tables facts that I know.
8	I know what tenths are and count up and down in tenths
9	I can find the fraction of an amount of objects. I can do this with unit fractions and non-unit fractions
10	I can show my understanding of equivalent fractions using diagrams
11	I can measure, compare, add/subtract length, mass, volume and capacity. I use the correct unit of measurement when recording
12	I can tell and write the time using an analogue clock. I can also read the time using 24 hour clock.
13	I can measure the perimeter of 2-D shapes
14	I can make the connection between right angles and turns. I can also say whether angles are greater/less than right angles.
	GDS
1	I spot patterns in results and use them to find other possibilities.
2	I understand a general statement and find particular examples that meet it.
3	I am confident to respond to 'What if?' questions.
4	I can explain to my peers how I have reached an answer and justify my reasoning.
5	I provide a convincing argument for the methods and solutions I use or arrive at.

Y4 Maths
Learning Journey

	Objective
	EXS
1	I can count backwards through zero into negative numbers
2	I can put numbers greater than 1,000 in order. I can also compare numbers using the symbols <, > and =.
3	I can round numbers to the nearest 10, 100 or 1,000
4	I can read Roman Numerals to 100
5	I can solve real life addition and subtraction problems
6	I know all of my times tables up to 12 x 12 and the division facts linked to them
7	I can multiply a two or three digit number by a one digit number
8	I can use diagrams to show my understanding of equivalent fractions
9	I know what hundredths are and count up and down in hundredths
10	I can round decimals to the nearest whole number
11	I can solve measurement and money problems that also involve my knowledge of decimals and fractions
12	I can compare and order numbers that have the same number of decimal places
13	I can convert between different units of measurement
14	I can compare different 2-D shapes using mathematical language
15	Using my knowledge of symmetry, I can complete a symmetric figure
16	I can plot specified points and then draw sides to complete a given polygon
17	When looking at bar charts, pictograms, tables and other graphs, I can answer questions requiring me to compare the data
	GDS
1	Solve multi-step problems related to on-going learning in science, history and geography
2	Use previous learning to influence how I tackle a range of problems
3	I can check my answers to ensure they make sense within the context of the problem
4	Apply my knowledge of fractions to solve problems involving money, time, weight and length
5	I can predict possibilities using existing data

Y5 Maths
Learning Journey

	Objectives
	EXS
1	I can round extremely large numbers to the nearest 10, 100, 1,000, 10,000 and 100,000
2	I can solve real life problems requiring me to add and subtract
3	I can use my knowledge of factors and multiples. I can find all pairs of factors as well as common factors of two numbers
4	I can solve real life problems that involve multiplication and division
5	I can identify square, cube and prime numbers
6	I can multiply a three digit number by a two digit number using long multiplication
7	I can divide up to a four digit number by a one digit number using short division. I can present remainders in the appropriate way
8	I can order and compare fractions where denominators
9	I can read and write decimals as fractions
10	I can order and compare numbers which have up to three decimal places
11	I can solve problems using my knowledge of percentage and decimal equivalents and sometimes, fraction equivalents
12	I can convert and compare between mixed numbers and improper fractions
13	I can convert between different units of measurement
14	I can measure and calculate the perimeter of different shapes whose edges all meet at right angles
15	I can calculate the area of rectangles and record using the correct units of measurement
16	I can find angles on a point, angles on a straight line and angles that are multiples of 90°
17	I can create, read and interpret data in different formats including timetables
	GDS
1	I collect my own data on personal projects and present information in different formats
2	I am resilient when learning to solve problems and investigating
3	I can identify more complex patterns and express generalisations using symbolic notation
4	I am confident when working with negative numbers relating this to time BC AD
5	I consistently use rounding to estimate answers to all operations.

Y6 Maths
Learning Journey

	Objective
	EXS
1	I am able to use my place value knowledge with numbers of all sizes and can round to any specific requirement
2	I count backwards and forwards across zero and can solve real life problems involving negative numbers
3	I can solve problems using my addition, subtraction, multiplication and division skills
4	I can multiply numbers up to four digits by a two digit number using long multiplication
5	I can divide numbers up to four digits by a two digit number using short division. I can also present remainders appropriately
6	I can use my knowledge of BIDMAS to carry out calculations using all four operations
7	I can calculate using fractions
8	I can solve problems using percentages and fractions of amounts
9	I can solve problems which require me to round the answer to a specific degree of accuracy
10	I can identify equivalent fractions, decimals and percentages and can use this knowledge when solving problems
11	Using my knowledge of fractions and decimals, I can solve problems that involve remainders and ratio
12	I can use solve problems that involve the use of algebra
13	I can convert between smaller and larger units of measurement using all numbers including decimals up to three decimal places
14	I can calculate the area of triangles and parallelograms
15	I can compare and classify 2-D shapes. I can also find unknown angles in 2-D shapes without using a protractor.
16	I can draw 2-D shapes using given information (dimensions and angles)
17	I can identify angles on a point, on a straight line, when they are vertically opposite and also find missing angles
18	I can draw and translate simple shapes and reflect them in the axes
19	I can answer questions and solve problems involving pie charts and line graphs
20	I can calculate the mean average and solve problems involving the mean
GDS	
1	I can use my understanding from previous learning to solve problems and investigate, showing resilience.
2	I can solve complex problems independently by breaking them down into manageable tasks.
3	I can collect data for a project and present information in formats of my choice, such as charts, graphs and tables.
4	I can give justified reasons and proof for my results.
5	I can interpret and discuss data to draw conclusions.

Times tables fluency progression

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Count in 10's from 0.	Count in steps of 2, 3, and 5 from 0,	Secure and maintain 2, 5, and 10 times tables.	Secure and maintain 2, 5, 10, 3, 4 and 8 times tables.	Secure and maintain all times tables.	Secure and maintain fluency in all multiplication tables, and corresponding division facts, through continued practice.
Children use equal groups to find a total.	Count in tens from any number, forward and backward.	Recall and use multiplication and division facts for the 3, 4 and 8 times tables.	Recall and use multiplication and division facts for 6 and 9's, building on from 3's.	Have a deep understanding of the relationship between multiplication and division and use these facts to help solve calculations and become a 'Multiplication Master'.	
Focus on counting equal groups of 2, 5 and 10 and explore this within 50.	Recall 5 and 10 multiplication tables, investigating link between 5 and 10's.		Recall and use the 7 multiplication table, and corresponding division facts.		.
Make arrays - Children begin to make arrays by making equal groups and building them up in columns or rows.	Recall and use multiplication and division facts for the 2 times tables.		Recall the 11 and 12 multiplication tables, and corresponding division facts.		
Making Doubles - Children explore doubling with numbers up to 20 Reinforce understanding that 'double' is two groups of a number or an amount.	Recognise odd and even numbers.		Inverse - Understand the relationship between multiplication and division.		

White Rose Maths Primary Progression of Skills

National-Curriculu
m-Progression-Prima

Autumn Small Steps Coverage (from White Rose Maths)

Year 1

Year 1 | Autumn term | Block 1 – Place value

Step 1	Sort objects
Step 2	Count objects
Step 3	Count objects from a larger group
Step 4	Represent objects
Step 5	Recognise numbers as words
Step 6	Count on from any number
Step 7	1 more
Step 8	Count backwards within 10
Step 9	1 less
Step 10	Compare groups by matching
Step 11	Fewer, more, same
Step 12	Less than, greater than, equal to
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	The number line

Year 1 | Autumn term | Block 2 – Addition and subtraction

Step 1	Introduce parts and wholes
Step 2	Part-whole model
Step 3	Write number sentences
Step 4	Fact families – addition facts
Step 5	Number bonds within 10
Step 6	Systematic number bonds within 10
Step 7	Number bonds to 10
Step 8	Addition – add together
Step 9	Addition – add more
Step 10	Addition problems
Step 11	Find a part
Step 12	Subtraction – find a part
Step 13	Fact families – the eight facts
Step 14	Subtraction – take away/cross out (How many left?)
Step 15	Take away (How many left?)
Step 16	Subtraction on a number line
Step 17	Add or subtract 1 or 2

Year 1 | Autumn term | Block 3 – Shape

Step 1	Recognise and name 3-D shapes
Step 2	Sort 3-D shapes
Step 3	Recognise and name 2-D shapes
Step 4	Sort 2-D shapes
Step 5	Patterns with 2-D and 3-D shapes

Year 2

Year 2 | Autumn term | Block 1 – Place value

Step 1	Numbers to 20
Step 2	Count objects to 100 by making 10s
Step 3	Recognise tens and ones
Step 4	Use a place value chart
Step 5	Partition numbers to 100
Step 6	Write numbers to 100 in words
Step 7	Flexibly partition numbers to 100
Step 8	Write numbers to 100 in expanded form
Step 9	10s on the number line to 100
Step 10	10s and 1s on the number line to 100
Step 11	Estimate numbers on a number line
Step 12	Compare objects
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	Count in 2s, 5s and 10s
Step 16	Count in 3s

Year 2 | Autumn term | Block 2 – Addition and subtraction

Step 1	Bonds to 10
Step 2	Fact families - addition and subtraction bonds within 20
Step 3	Related facts
Step 4	Bonds to 100 (tens)
Step 5	Add and subtract 1s
Step 6	Add by making 10
Step 7	Add three 1-digit numbers
Step 8	Add to the next 10
Step 9	Add across a 10
Step 10	Subtract across 10
Step 11	Subtract from a 10
Step 12	Subtract a 1-digit number from a 2-digit number (across a 10)
Step 13	10 more, 10 less
Step 14	Add and subtract 10s
Step 15	Add two 2-digit numbers (not across a 10)
Step 16	Add two 2-digit numbers (across a 10)
Step 17	Subtract two 2-digit numbers (not across a 10)
Step 18	Subtract two 2-digit numbers (across a 10)
Step 19	Mixed addition and subtraction
Step 20	Compare number sentences
Step 21	Missing number problems

Year 2 | Autumn term | Block 3 – Shape

Step 1	Recognise 2-D and 3-D shapes
Step 2	Count sides on 2-D shapes
Step 3	Count vertices on 2-D shapes
Step 4	Draw 2-D shapes
Step 5	Lines of symmetry on shapes
Step 6	Use lines of symmetry to complete shapes
Step 7	Sort 2-D shapes
Step 8	Count faces on 3-D shapes
Step 9	Count edges on 3-D shapes
Step 10	Count vertices on 3-D shapes
Step 11	Sort 3-D shapes
Step 12	Make patterns with 2-D and 3-D shapes

Year 3 & 4

Year 3 | Autumn term | Block 1 – Place value

Step 1	Represent numbers to 100
Step 2	Partition numbers to 100
Step 3	Number line to 100
Step 4	Hundreds
Step 5	Represent numbers to 1,000
Step 6	Partition numbers to 1,000
Step 7	Flexible partitioning of numbers to 1,000
Step 8	Hundreds, tens and ones

Year 4 | Autumn term | Block 1 – Place value

Step 1	Represent numbers to 1,000
Step 2	Partition numbers to 1,000
Step 3	Number line to 1,000
Step 4	Thousands
Step 5	Represent numbers to 10,000
Step 6	Partition numbers to 10,000
Step 7	Flexible partitioning of numbers to 10,000
Step 8	Find 1, 10, 100, 1,000 more or less

Step 9	Find 1, 10 or 100 more or less
Step 10	Number line to 1,000
Step 11	Estimate on a number line to 1,000
Step 12	Compare numbers to 1,000
Step 13	Order numbers to 1,000
Step 14	Count in 50s

Step 9	Number line to 10,000
Step 10	Estimate on a number line to 10,000
Step 11	Compare numbers to 10,000
Step 12	Order numbers to 10,000
Step 13	Roman numerals
Step 14	Round to the nearest 10
Step 15	Round to the nearest 100
Step 16	Round to the nearest 1,000
Step 17	Round to the nearest 10, 100 or 1,000

Year 3 | Autumn term | Block 2 – Addition and subtraction

Step 1	Apply number bonds within 10
Step 2	Add and subtract 1s
Step 3	Add and subtract 10s
Step 4	Add and subtract 100s
Step 5	Spot the pattern
Step 6	Add 1s across a 10
Step 7	Add 10s across a 100
Step 8	Subtract 1s across a10
Step 9	Subtract 10s across a 100
Step 10	Make connections
Step 11	Add two numbers (no exchange)
Step 12	Subtract two numbers (no exchange)

Year 4 | Autumn term | Block 2 – Addition and subtraction

Step 1	Add and subtract 1s, 10s, 100s and 1,000s
Step 2	Add up to two 4-digit numbers – no exchange
Step 3	Add two 4-digit numbers – one exchange
Step 4	Add two 4-digit numbers – more than one exchange
Step 5	Subtract two 4-digit numbers – no exchange
Step 6	Subtract two 4-digit numbers – one exchange
Step 7	Subtract two 4-digit numbers – more than one exchange
Step 8	Efficient subtraction
Step 9	Estimate answers
Step 10	Checking strategies

Step 13	Add two numbers (across a 10)
Step 14	Add two numbers (across a 100)
Step 15	Subtract two numbers (across a 10)
Step 16	Subtract two numbers (across a 100)
Step 17	Add 2-digit and 3-digit numbers
Step 18	Subtract a 2-digit number from a 3-digit number
Step 19	Complements to 100
Step 20	Estimate answers
Step 21	Inverse operations
Step 22	Make decisions

Year 4 | Autumn term | Block 3 – Area

Step 1	What is area?
Step 2	Count squares
Step 3	Make shapes
Step 4	Compare areas

Year 3 | Autumn term | Block 3 – Multiplication and division

Step 1	Multiplication – equal groups
Step 2	Use arrays
Step 3	Multiples of 2
Step 4	Multiples of 5 and 10
Step 5	Sharing and grouping
Step 6	Multiply by 3
Step 7	Divide by 3
Step 8	The 3 times-table
Step 9	Multiply by 4
Step 10	Divide by 4
Step 11	The 4 times-table
Step 12	Multiply by 8
Step 13	Divide by 8
Step 14	The 8 times-table
Step 15	The 2, 4 and 8 times-tables

Year 4 | Autumn term | Block 4 – Multiplication and division

Step 1	Multiples of 3
Step 2	Multiply and divide by 6
Step 3	6 times-table and division facts
Step 4	Multiply and divide by 9
Step 5	9 times-table and division facts
Step 6	The 3, 6 and 9 times-tables
Step 7	Multiply and divide by 7
Step 8	7 times-table and division facts
Step 9	11 times-table and division facts
Step 10	12 times-table and division facts
Step 11	Multiply by 1 and 0
Step 12	Divide a number by 1 and itself
Step 13	Multiply three numbers

Year 5

Year 5 | Autumn term | Block 1 – Place value

Step 1	Roman numerals to 1,000
Step 2	Numbers to 10,000
Step 3	Numbers to 100,000
Step 4	Numbers to 1,000,000
Step 5	Read and write numbers to 1,000,000
Step 6	Powers of 10
Step 7	10/100/1,000/10,000/100,000 more or less
Step 8	Partition numbers to 1,000,000
Step 9	Number line to 1,000,000
Step 10	Compare and order numbers to 100,000
Step 11	Compare and order numbers to 1,000,000
Step 12	Round to the nearest 10, 100 or 1,000
Step 13	Round within 100,000
Step 14	Round within 1,000,000

Year 5 | Autumn term | Block 2 – Addition and subtraction

Step 1	Mental strategies
Step 2	Add whole numbers with more than four digits
Step 3	Subtract whole numbers with more than four digits
Step 4	Round to check answers
Step 5	Inverse operations (addition and subtraction)
Step 6	Multi-step addition and subtraction problems
Step 7	Compare calculations
Step 8	Find missing numbers

Year 5 | Autumn term | Block 3 – Multiplication and division

Step 1	Multiples
Step 2	Common multiples
Step 3	Factors
Step 4	Common factors
Step 5	Prime numbers
Step 6	Square numbers
Step 7	Cube numbers
Step 8	Multiply by 10, 100 and 1,000
Step 9	Divide by 10, 100 and 1,000
Step 10	Multiples of 10, 100 and 1,000

Year 5 | Autumn term | Block 4 – Fractions A

Step 1	Find fractions equivalent to a unit fraction
Step 2	Find fractions equivalent to a non-unit fraction
Step 3	Recognise equivalent fractions
Step 4	Convert improper fractions to mixed numbers
Step 5	Convert mixed numbers to improper fractions
Step 6	Compare fractions less than 1
Step 7	Order fractions less than 1
Step 8	Compare and order fractions greater than 1
Step 9	Add and subtract fractions with the same denominator
Step 10	Add fractions within 1
Step 11	Add fractions with total greater than 1
Step 12	Add to a mixed number
Step 13	Add two mixed numbers
Step 14	Subtract fractions
Step 15	Subtract from a mixed number
Step 16	Subtract from a mixed number – breaking the whole
Step 17	Subtract two mixed numbers

Year 6

Year 6 | Autumn term | Block 1 – Place value

Step 1	Numbers to 1,000,000
Step 2	Numbers to 10,000,000
Step 3	Read and write numbers to 10,000,000
Step 4	Powers of 10
Step 5	Number line to 10,000,000
Step 6	Compare and order any integers
Step 7	Round any integer
Step 8	Negative numbers

Year 6 | Autumn term | Block 2 – Addition, subtraction, multiplication and division

Step 1	Add and subtract integers
Step 2	Common factors
Step 3	Common multiples
Step 4	Rules of divisibility
Step 5	Primes to 100
Step 6	Square and cube numbers
Step 7	Multiply up to a 4-digit number by a 2-digit number
Step 8	Solve problems with multiplication
Step 9	Short division
Step 10	Division using factors
Step 11	Introduction to long division

Step 12	Long division with remainders
Step 13	Solve problems with division
Step 14	Solve multi-step problems
Step 15	Order of operations
Step 16	Mental calculations and estimation
Step 17	Reason from known facts

Year 6 | Autumn term | Block 3 – Fractions A

Step 1	Equivalent fractions and simplifying
Step 2	Equivalent fractions on a number line
Step 3	Compare and order (denominator)
Step 4	Compare and order (numerator)
Step 5	Add and subtract simple fractions
Step 6	Add and subtract any two fractions
Step 7	Add mixed numbers
Step 8	Subtract mixed numbers
Step 9	Multi-step problems

Year 6 | Autumn term | Block 4 – Fractions B

Step 1	Multiply fractions by integers
Step 2	Multiply fractions by fractions
Step 3	Divide a fraction by an integer
Step 4	Divide any fraction by an integer
Step 5	Mixed questions with fractions
Step 6	Fraction of an amount
Step 7	Fraction of an amount – find the whole

Year 6 | Autumn term | Block 5 – Converting units

Step 1	Metric measures
Step 2	Convert metric measures
Step 3	Calculate with metric measures
Step 4	Miles and kilometres
Step 5	Imperial measures

Spring and Summer coverage added throughout the year when path decided.

Calculation Policy links

Addition

Addition Calculation Policy St Giles' and St George's.pub

Subtraction

Subtraction Calculation Policy St Giles' and St George's.pub

Multiplication

Multiplication Calculation Policy St Giles' and St George's.pub

Division

Division Calculation Policy St Giles' and St George's.pub

SEND Adjustments

To ensure all pupils can access our Maths curriculum and lessons, we make the following adjustments where necessary:

Cognition and Learning	Communication and Language	SEMH	Physical and Sensory
• Alternative methods of recording (talking tins, laptops, practical tasks) • Differentiated tasks – sometimes from the previous year group objectives • A range of practical equipment to support • Visual supports • Knowledge organisers with worked examples • Pre-teaching of vocabulary • Teaching of key skills • Coloured overlays • Timers and chunked activities • Sit close to the board • Allow extra time	• Talking tins • Pre-teaching language • Visuals to support • Now/Next • Increased focus on number and place value • Extra thinking time • Explicit instructions • Steps to success (one task at a time)	• Brain and movement breaks • Smaller tasks to ensure they are manageable • CalmBrain • Reward time • Reflection areas (weighted blankets) • Sensory/fidget toys • Sit near to the teacher • Steps to success (one task at a time) • Peer buddies	• Own learning space (workstation) • Brain/Sensory breaks • Appropriate seating • Fidget toys • Adapted resources (scissors, rulers etc) • Sloping board • Alternative methods of recording • Wobble cushions • Pencil grips/sloping boards