Comberton Primary School
Mathematics Curriculum

Our Vision

Our role at Comberton is to spark curiosity, creating a world of opportunity, awe and wonder for our children and staff. We aim to equip our children with the knowledge, skills and values to lead productive, healthy and inspired lives in modern day Britain.

Subject Intent

At Comberton Primary school we aim to provide a highly effective maths curriculum that develops a deep understanding of mathematical concepts through a range of rich and challenging problems. We believe that maths is essential to everyday life, is critical to understanding Science, Technology and Engineering and also necessary for secure financial literacy. We want our children to enjoy the awe and wonder of Mathematics as well as allowing them to build strong foundations for their future lives and careers.

We strive for our pupils to develop a secure foundation of knowledge and skills, as well as the confidence to apply their learning in a range of contexts, so that they have a understanding which allows them to be curious about the mathematical world around them.
At the heart of this is the expectation that at Comberton all pupils will have the opportunity to achieve success, so that disadvantaged pupils and those with special educational needs and disabilities will be fully supported to achieve this.

Through the use of structured lessons, which build upon carefully sequenced small steps, caters for all pupils, and takes into consideration individual learning needs and starting points, **our children will leave Comberton with**:

- a fluency in the fundamentals of mathematics, and be able to recall and apply their knowledge rapidly and accurately during both retrieval practice and their daily lessons.
- a conceptual understanding through Concrete, Pictorial and Abstract Learning. Children will engage with a varied range of concrete manipulatives, pictorial representations and abstract questioning.
- strategies to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and develop an argument, justification or proof using mathematical language.
- an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.
- positive and resilient attitudes towards mathematics by receiving a sustained level of challenge through high-quality activities.

National Curriculum Overview

EYFS includes non-statutory 'Early Learning Goals' in italics.

Concept/Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Counting	Verbally count beyond 20, recognising the pattern of the counting system Subitise (recognise quantities without counting) up to 5	count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number			count backwards through zero to include negative numbers	interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	use negative numbers in context, and calculate intervals across zero
		count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward	count from 0 in multiples of 4, 8, 50 and 100;	count in multiples of 6, 7, 9, 25 and 1000	count forwards or backwards in steps of powers of 10 for any given number up to 1000000	
		given a number, identify one more and one less		find 10 or 100 more or less than a given number	find 1000 more or less than a given number		
Comparing Numbers		use the language of: equal to, more than, less than (fewer), most, least	compare and order numbers from 0 up to 100; use <, > and = signs	compare and order numbers up to 1000	order and compare numbers beyond 1000	read, write, order and compare numbers to at least 1 000000 and determine the value of each digit	read, write, order and compare numbers up to 10 000000 and determine the value of each digit
Reading and Writing number	Link the number symbol (numeral) with its cardinal number value	read and write numbers from 1 to 20 in numerals and words.	read and write numbers to at least 100 in numerals and in words	read and write numbers up to 1000 in numerals and in words		read, write, order and compare numbers to at least 1 000000 and determine the value of each digit	read, write, order and compare numbers up to 10 000000 and determine the value of each digit
				tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	
Understanding Place Value	have a deep understanding of number to 10, including the composition of each number		recognise the place value of each digit in a two-digit number (tens, ones)	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	read, write, order and compare numbers to at least 1 000000 and determine the value of each digit	read, write, order and compare numbers up to 10 000000 and determine the value of each digit
					find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places

Rounding					round any number to the nearest 10, 100 or 1000	round any number up to 1000000 to the nearest 10, 100, 1000, 10 000 and 100000	round any whole number to a required degree of accuracy
Addition and Subtraction	recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	represent and use number bonds and related subtraction facts within 20	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				
	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity	add and subtract one-digit and two-digit numbers to 20, including zero	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers	add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds		add and subtract numbers mentally with increasingly large numbers	perform mental calculations, including with mixed operations and large numbers
			show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot				use their knowledge of the order of operations to carry out calculations involving the four operations
***Addition and* subtraction Formal Methods**		read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs		add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
			recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	estimate the answer to a calculation and use inverse operations to check answers	estimate and use inverse operations to check answers to a calculation	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
Multiplication and Division	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally		recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	recall multiplication and division facts for multiplication tables up to 12 × 12		

			show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot		use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	multiply and divide numbers mentally drawing upon known facts	perform mental calculations, including with mixed operations and large numbers
			calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs		recognise and use factor pairs and commutativity in mental calculations	multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	
Multiplication and Division **Formal Methods**				write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
						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	divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
						identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	identify common factors, common multiples and prime numbers
						know and use the vocabulary of prime numbers, prime factors	

						and composite (non-prime) numbers	
						establish whether a number up to 100 is prime and recall prime numbers up to 19	
						recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3
Fractions including Decimals and Percentages				count up and down in tenths	count up and down in hundredths		
		recognise, find and name a half as one of two equal parts of an object, shape or quantity	recognise, find, name and write fractions $^1/_3$, $^1/_4$, $^2/_4$ and $^3/_4$ of a length, shape, set of objects or quantity	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
				recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.			
		recognise, find and name a quarter as one of four equal parts of an object, shape or quantity		recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators			
Order fractions				compare and order unit fractions, and fractions with the same denominators		compare and order fractions whose denominators are all multiples of the same number	compare and order fractions, including fractions >1
Decimals					compare numbers with the same number of decimal places up to two decimal places	read, write, order and compare numbers with up to three decimal places	identify the value of each digit in numbers given to three decimal places
					round decimals with one decimal place to the nearest whole number	round decimals with two decimal places to the nearest whole number and to one decimal place	solve problems which require answers to be rounded to specified degrees of accuracy

			write simple fractions e.g. $^1/_2$ of 6 = 3 and recognise the equivalence of $^2/_4$ and $^1/_2$.	recognise and show, using diagrams, equivalent fractions with small denominators	recognise and show, using diagrams, families of common equivalent fractions	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	use common factors to simplify fractions; use common multiples to express fractions in the same denomination
					recognise and write decimal equivalents of any number of tenths or hundredths	read and write decimal numbers as fractions (e.g. 0.71 = $^{71}/_{100}$)	associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^3/_8$)
						recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
					recognise and write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$	recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100 as a decimal fraction	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Add and subtract fractions				add and subtract fractions with the same denominator within one whole (e.g. $^5/_7 + ^1/_7 = ^6/_7$)	add and subtract fractions with the same denominator	add and subtract fractions with the same denominator and multiples of the same number	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
						recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $^2/_5 + ^4/_5 = ^6/_5 = 1^1/_5$)	
Multiply Fractions						multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $^1/_4 \times ^1/_2 = ^1/_8$)
							multiply one-digit numbers with up to two

							decimal places by whole numbers
							divide proper fractions by whole numbers (e.g. $^1/_3 \div 2 = {}^1/_6$)
Multiplying decimals							multiply one-digit numbers with up to two decimal places by whole numbers
					find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths		multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
							identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
							associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^3/_8$)
							use written division methods in cases where the answer has up to two decimal places
Measurement	*Compare length, weight and capacity*	compare, describe and solve practical problems for: * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] * mass/weight [e.g. heavy/light, heavier than, lighter than] * capacity and volume [e.g. full/empty, more than, less	compare and order lengths, mass, volume/capacity and record the results using >, < and =		estimate, compare and calculate different measures, including money in pounds and pence	calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes	calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3) and extending to other units such as mm^3 and km^3.

		than, half, half full, quarter] * time [e.g. quicker, slower, earlier, later]					
Volume						estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water)	
Sequencing		sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	compare and sequence intervals of time	compare durations of events, for example to calculate the time taken by particular events or tasks			
		measure and begin to record the following: * **lengths and heights** * **mass/weight** * **capacity and volume** * **time** (hours, minutes, seconds**)**	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, using rulers, scales, thermometers and measuring vessels	measure, compare, add and subtract: **lengths** (m/cm/mm); **mass** (kg/g); **volume/capacity** (l/ml)	estimate, compare and calculate **different measures,** including **money in pounds and pence** (appears also in Comparing)	use all four operations to solve problems involving measure (e.g. **length, mass, volume, money**) using decimal notation including scaling.	
Perimeter				measure the **perimeter** of simple 2-D shapes	measure and calculate the **perimeter** of a rectilinear figure (including squares) in centimetres and metres	measure and calculate the **perimeter** of composite rectilinear shapes in centimetres and metres	recognise that shapes with the same areas can have different **perimeters** and vice versa
Area					find the area of rectilinear shapes by counting squares	calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes	calculate the area of parallelograms and triangles
							calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm 3) and cubic metres (m 3), and extending to other units [e.g. mm 3 and km 3].

							recognise when it is possible to use formulae for area and volume of shapes
Money		recognise and know the value of different denominations of coins and notes	recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	add and subtract amounts of money to give change, using both £ and p in practical contexts			
			find different combinations of coins that equal the same amounts of money				
			solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change				
Time		tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	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.	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	read, write and convert time between analogue and digital 12 and 24-hour clocks		
		recognise and use language relating to dates, including days of the week, weeks, months and years	know the number of minutes in an hour and the number of hours in a day.	estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight	solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	solve problems involving converting between units of time	
Converting units of measure				know the number of seconds in a minute and the number of days in each month, year and leap year	convert between different units of measure (e.g. kilometre to metre; hour to minute)	convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	use, read, write and convert 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
						understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	convert between miles and kilometres

Geometry – properties of shape	*Select, rotate and manipulate shapes to develop spatial reasoning skills*	recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line		identify lines of symmetry in 2-D shapes presented in different orientations	identify 3-D shapes, including cubes and other cuboids, from 2-D representations	recognise, describe and build simple 3-D shapes, including making nets
	Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.		identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces				illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
			Identify 2-D shapes on the surface of 3-D shapes, (for example, a circle on a cylinder and a triangle on a pyramid)	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	complete a simple symmetric figure with respect to a specific line of symmetry	draw given angles, and measure them in degrees ($^{\circ}$)	draw 2-D shapes using given dimensions and angles
			compare and sort common 2-D and 3-D shapes and everyday objects		compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	use the properties of rectangles to deduce related facts and find missing lengths and angles	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
						distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
Geometry: Position and Direction				recognise angles as a property of shape or a description of a turn		know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
Angles				identify right angles, 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 acute and obtuse angles and compare and order angles up to two right angles by size	identify: * angles at a point and one whole turn (total 360°) * angles at a point on a straight line and ½ a turn (total 180°) * other multiples of 90°	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

				identify horizontal and vertical lines and pairs of perpendicular and parallel lines			
Position and Direction		describe position, direction and movement, including half, quarter and three-quarter turns.	use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)		describe positions on a 2-D grid as coordinates in the first quadrant	identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	describe positions on the full coordinate grid (all four quadrants)
					describe movements between positions as translations of a given unit to the left/right and up/down		draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
					plot specified points and draw sides to complete a given polygon		
			order and arrange combinations of mathematical objects in patterns and sequences				
Statistics			interpret and construct simple pictograms, tally charts, block diagrams and simple tables	interpret and present data using bar charts, pictograms and tables	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	complete, read and interpret information in tables, including timetables	interpret and construct pie charts and line graphs and use these to solve problems
			ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity				
			ask and answer questions about totalling and comparing categorical data				

Unit Overview (Long Term Plans)

Reception – Yearly Overview

	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7
Autumn Term	Number Rhymes	Number Rhymes	Reciting Number Names & Counting 1.1	Reciting Number Names & Cardinal Values	Reciting Number Names & Cardinal Values (1,2,3)	Values of the Numicon Shapes (1,2,3)	Exploring Size – Values (1,2,3)	Exploring Size – Values (4)		Language of Size – before and after (4)	Patterns (5)	Patterns (5)	Numerals and Numicon (6)	Numerals and Numicon (6)	Grouping Objects (7)	2D and 3D Shapes & Length (7)
	1	2	3	4	5					1	2	3	4	5		
Spring Term	One more & Addition (8)		One less & Subtraction (8)		Weight & Capacity (9)					Tens and Ones (9)	Tens and Ones & Estimation (10)	Doubling (10)	Halving	Sharing		
	1	2	3	4	5	6	7			1	2	3	4	5	6	7
Summer Term	Time	Distance	Ordinal Numbers (positions)	Patterns	Sharing into Groups (2/5/10s)	3D Shapes	Money			Measuring	Data Handling	Numbers more, less and in between	Estimation	Size, Weight and Capacity	Distance, time and money	Consolidation

Year 1 – Maths Yearly Overview

Aut	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7
4 lessons a week	Number: Composition up to 10								Number: Addition						N: Subtraction
1 lesson a week	Geometry: Properties of Shapes						Fractions of an object or shape		Measurement: Length & Height				Measurement: Weight & Mass		

Spr	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5				Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	
4 lessons a week	Number: Subtraction		Number: Addition & Subtraction						Number: Multiplication (Doubles & halves)			Number: Composition 20 to 100)		
1 lesson a week	Measurement: Capacity and Volume			Geometry: Position and Direction					Position a Direction	Time days, months, vocabulary				

Sum	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7		Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7
4 lessons a week	Number: Composition 20 to 100)			Number (teen numbers)					Multiplication (2s 5s 10s) (including money)			Fractions/ Division (sharing)		Consolidation & Assessment	
1 lesson a week	Time Clock					Money			Mone y	Consolidation & Assessment					

Year 2 – Yearly Overview

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value				Number: Addition and Subtraction						Number: Multiplication and Division			Measurement: Money	
	1	2	3		4	5	1	2	3	4	5				
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shapes		Number: Addition and subtraction	Number: Fractions			Measurement: Length and height				
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Summer	Measurement: Time	Geometry: Properties of Shape	Measurement: Mass, Capacity and temperature			Geometry: Position and direction		Geometry: Properties of Shapes	Testing	Geometry: Position and direction	Number: Multiplication and Division		Number: + - Consolidation	Measurement: Time	

Year 3 – Yearly Overview 2023-24

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value			Number: Addition and Subtraction					Number: Multiplication and Division					Geometry: Shape	
	1	2	3	4	5	1	2	3	4	5					
Spring	Number: Multiplication and Division		Number: Fractions			Number: Multiplication and Division			Measurement: Money						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Summer	Number: Fractions		Geometry: Shape	Measurement: length and perimeter			Measurement: Time			Measurement: Mass and Capacity		Statistics		Consolidation	

Year 4 – Yearly Overview

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value				Number: Addition and Subtraction			Measurement: Area	Number: Multiplication and Division						Measure: Length & Perimeter
	1	2	3	4	5			1	2	3	4	5			
Spring	Number: Fractions				Measurement Area			Number: Fractions				Number: Decimals			
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Summer	Number: Decimals				Measurement: Money		Measurement: Time	Geometry: Shape			Statistics	Geometry: Position and Direction		Consolidation	

Year 5 – Yearly Overview 5JM

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value			Number: Addition and Subtraction		Statistics		Number: Multiplication and Division		Perimeter and Area			Number: Multiplication and Division		
	1	2	3	4	5	1	2	3	4	5					
Spring	Number: Multiplication and Division			Number: Fractions		Geometry		Number: Fractions							
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Summer	Decimals and Percentages			Geometry: Position and Direction		Number: Decimals		Number: Decimals		Measurement: Converting Units				Assessment	

Year 5RB – Maths Yearly Overview

Aut	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7
RB: 4 lessons a week	Number: Place Value				Number: Addition and Subtraction				Number: Multiplication and Division A			Number: Fractions A			N: Multiplication & Division A
KH: 1 lesson a week	Geometry: Properties of Shapes								Geometry: Properties of Shapes				Statistics		

Spr	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5			Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	
RB: 4 lessons a week	Number: Multiplication & Division B			Number: Fractions B				Number: Multiplication & Division C			Number: Percentages and Decimals A		
KH: 1 lesson a week	Statistics							Measurement: Perimeter and Area					

Sum	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7		Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7
RB: 4 lessons a week	Number: Percentages and Decimals A		Number: Fractions		Number: Decimals				N: Decimals	Number: Negative numbers		Measurement: Converting units			
KH: 1 lesson a week	Measurement: Perimeter & Area		Geometry: Position and Direction						Geometry: Position and Direction				Measurement: Volume		

Year 6 Yearly Overview - 6CJ

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value		Number: Addition, Subtraction, Multiplication and Division			Test week	Number: Addition and Subtraction Multiplication and Division		Number: Fractions Number: Decimals		Number: Percentages	Geometry: Properties of shapes	Number: Algebra	Test week	Number: Algebra
	1	2	3	4	5				1	2	3	4	5		
Spring	Measurement: Converting Units	Measurement: Perimeter, Area and Volume		Test week	Number: ratio				Geometry: Position and direction	Statistics		Test week	Consolidation		
	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Summer	Consolidation					SATs	Residential		Problem Solving and Investigations						

Year 6TP – Yearly Overview

	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Autumn	Number: Place Value				Number: Addition and subtraction, Multiplication and Division (Test week 10/10-3 lessons lost)			Number: Fractions and decimals					Geometry: Properties of 2D and 3D shapes		percentages
	1	2	3	4	5			1	2	3	4	5			
Spring	Number: Percentages		Number: Algebra		Measurement: Converting Units			Measurement: Perimeter, Area and Volume		Number: ratio		Statistics			
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Summer	Statistics		Geometry: Position and direction		Revision		SATs week	Resid ential	Problem Solving and Investigations						

Year 6HB – Yearly Overview

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Autumn	Number: Bonds to 10 Visual patterns Odd and Even Resources Skip counting		Number: Place Value (including decimals) (include rounding)				Number: Addition and Subtraction (try to include negative numbers)				Multiplication and Division Formal methods Scale by powers of 10 (include factors and multiples, square numbers and prime numbers)				Geometry Properties of 3D shapes/nets
	16	17	18	19	20			21	22	23	24	25			
Spring	Measurement Unit conversions Include time	Number: Fractions						Number: Fractions (percentages)		Geometry 2D shape prop circles	Measurement: Area and perimeter (volume) formulae				
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
Summer	Statistics Graphs and tables	Geometry Angles draw/calc	Ratio and prop relationships	Algebra Sequences unknowns	Geometry position and direction	SATS	Fractions Adding and subtracting fractions with different denominators				Number Order of operations	Algebra Simple formulae	Statistics		

Assessment

Mathematics
End of Year Assessment Statements
Reception

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division
Talk about parts that make up a whole number to 10.	Recite Numbers up to 50.	Recall number facts from 0-5 and recall some number bonds to 10.	Share amounts between groups of 2, 3 and 4 and say whether these have been shared fairly or not.
Compare two quantities and say when one is greater than, less than or has the same as the other quantity.			Recall some doubling facts within 10.

Mathematics
End of Year Assessment Statements
Year 1

Children in year one are able to use equipment to help them achieve these end of year assessment statements.

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
Count within 100, forwards and backwards, starting with any number.	Develop fluency in addition and subtraction facts within 10.	Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	Recognise equal groups and know how many are in each group.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity
Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.	Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.		Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity

Mathematics
End of Year Assessment Statements
Year 2

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.	Secure fluency in addition and subtraction facts within 10, through continued practice.	Add and subtract across 10	Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.	Recognise, find and name fractions which represent 1 or several parts of a whole that is divided into equal parts.
Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.		Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more…?".	Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division)	
		Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.		
		Add and subtract within 100 by applying related onedigit addition and subtraction facts: add and subtract any 2 twodigit numbers.		

Mathematics
End of Year Assessment Statements
Year 3

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
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.	Secure fluency in addition and subtraction facts that bridge 10, through continued practice.	Calculate complements to 100, for example: 46 + ? = 100	Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.
Recognise the place value of each digit in *three*-digit numbers, and compose and decompose *three*-digit numbers using standard and non-standard partitioning.	Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.	Add and subtract up to three-digit numbers using columnar methods.		Find unit fractions of quantities using known division facts (multiplication tables fluency).
Reason about the location of any *three*-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)	Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.		Reason about the location of any fraction within 1 in the linear number system.
Divide 100 into 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.				Add and subtract fractions with the same denominator, within 1.

Mathematics
End of Year Assessment Statements
Year 4

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.	Recall multiplication and division facts up to 12 x 12, and recognise products in multiplication tables as multiples of the corresponding number.	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction, where appropriate estimating and using inverse operations to check answers to a calculation.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Reason about the location of mixed numbers in the linear number system.
Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)		Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders.	Convert mixed numbers to improper fractions and vice versa.
Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.			Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.
Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.			Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.	
			Understand and apply the distributive property of multiplication.	

Mathematics
End of Year Assessment Statements
Year 5

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.	Add and subtract whole numbers with more than 4 digits, including using formal written methods of columnar addition and subtraction, where appropriate estimating and using inverse operations to check answers to a calculation.	Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.	Find non-unit fractions of quantities.
Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).	Add and subtract numbers mentally with increasingly larger numbers	Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.	Find equivalent fractions and understand that they have the same value and the same position in the linear number system
Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.			Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.	Recall decimal fraction equivalents for 1/2, ¼, 1/5 and 1/10 and for multiples of these proper fractions.
Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.			Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.	
Convert between units of measure, including using common decimals and fractions.				

Mathematics
End of Year Assessment Statements
Year 6

Number & Place Value	Number Facts	Addition & Subtraction	Multiplication & Division	Fractions
Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000)	Recall and use equivalences between simple fractions, decimals and percentages.	Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.	Recognise when fractions can be simplified, and use common factors to simplify fractions.
Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning.		Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.	Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.	Express fractions in a common denomination and use this to compare fractions that are similar in value.
Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.			Solve problems involving ratio relationships.	Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy
Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts			Solve problems with 2 unknowns.	