

St Leonard's Primary School Mathematics Yearly Rolling Programme

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The intent of our mathematics 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. We intend that all children, regardless of their starting point, will maximise their academic achievement and leave St Leonard's with an appreciation and enthusiasm for Maths, resulting in a lifelong positive relationship with number. We ensure that we deliver a high-quality maths curriculum that is both challenging and enjoyable and allows children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning, and competence in solving increasingly sophisticated problems.

It is essential that Mathematics is embedded throughout all strands of the National Curriculum, and we intend for our pupils to be able to apply their mathematical knowledge to all other subjects, showing them that maths is essential to everyday life and enabling them to become confident mathematicians who are not afraid to take risks.

mplementation

Lessons are planned and sequenced so that new knowledge and skills build on what has been taught before. Teachers follow the White Rose Maths Hub materials and staff also refer to the Calculation Policy when teaching formal methods, understanding that sometimes children find their own efficient methods along the way. Lessons may be personalised to address the individual needs and requirements for a class, but coverage is maintained. Due to the nature of our cohort, the mixed aged planning from White Rose is used in key stages where necessary.

To further develop the children's fluency, reasoning and problem-solving, we use mastery materials which correlate to the White Rose lessons and further develops children's understanding of a concept and the links between maths topics. We also use a range of planning resources including those provided by the NCETM and NRICH to enrich our children's maths diet.

All children have access to their own personal account of 'Times Tables Rockstar' where they can compete against other pupils and classes in school and each week, in class, from Year 1 upwards, there will be a Times Tables focus to give children the opportunity to practise and improve their rapid recall skills with facts 12x12.

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The impact of our mathematics curriculum is that children understand the relevance and importance of what they are learning in relation to real world concepts. Children know that maths is a vital life skill that they will rely on in many areas of their daily life. Children are happy learners who talk enthusiastically about their learning and who eager to further their progress in maths. They have a positive view of maths and know that it is reasonable to make mistakes because this can strengthen their learning through the journey to finding an answer. Children are confident to 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Our children have a good understanding of their strengths and targets for development in maths and what they need to do to improve.

Our maths books evidence work of a high standard of which children clearly take pride; the components of the teaching sequences demonstrate good coverage of fluency, reasoning and problem solving. Our school standards are high, we moderate our books both internally and externally and children are achieving well. The use of White Rose resources ensures consistent teaching practices throughout the school that are more effective for pupil progress.

			C	urriculum Coverage			
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Block 1	Block 1	Block 1	Block 1	Block 1	Block 1	Block 1
	Match, sort	Place Value (Within 10)	Place Value	Place Value	Place Value	Place Value	Place Value
	and compare						
	Weeks 1 and 2 –	Count numbers to 10 in	Count in steps of 2, 3, and	Count from 0 in multiples	Count in multiples of 6, 7,	Count forwards or	Read, write, order, and
	Getting to know you.	numerals.	5 from 0, and in tens from any number,	of 4, 8, 50 and 100.	9, 25 and 1000.	backwards in steps of powers of 10 for any given	compare numbers up to 10 000 000 and determine
	Opportunities for settling in,	Identify and represent numbers using objects and pictorial	forward and backward.	Find 10 or 100 more or less than a given number.	Count backwards through zero to include negative	number up to 1 000 000.	the value of each digit.
	introducing the	representations.	Read and write numbers	ress than a given namben	numbers.	Count forwards and	Round any whole number
	provision, and getting		to at least 100 in	identify, represent, and		backwards with positive	to a required degree of
	to know the children.	Read and write numbers from 1	numerals and in words.	estimate numbers using	Identify, represent, and	and negative whole	accuracy.
		to 10 in numerals and words.		different representations.	estimate numbers using	numbers, including	,
	Key times of the day,		Identify, represent, and		different representations.	through zero.	Use negative numbers in
	class routines.	Given a number, identify one	estimate numbers using	Read and write numbers	Read Roman numerals to		context and calculate
	Positional language.	more and one less.	different representations, including the number	up to 1000 in numerals	100 (I to C) and know that	Read Roman numerals to	intervals across zero.
	Positional language.		line.	and in words.	over time, the numeral	1000 (M) and recognise	Solve number and
Ε			mic.	Recognise the place value	system changed to include	years written in Roman	practical problems that
<u>Te</u>	Block 1		Recognise the place value	of each digit in a three-	the concept of zero and	numerals.	involve all of the above
Autumn Term			of each digit in a two-	digit number (hundreds,	place value.	Read, write, order, and	
Ę	Match and sort		digit number (tens, ones).	tens, ones).	'	compare numbers to at	
Au	objects.				Find 1000 more or less	least 1 000 000 and	
	Identify sets.		Compare and order	Compare and order	than a given number.	determine the value of	
	Explore sorting		numbers from 0 up to 100; use and = signs.	numbers up to 1000.	Recognise the place value	each digit.	
	techniques and rules.		100, use and – signs.	Solve number problems	of each digit in a four-digit		
	teeriniques una ruies.		Use place value and	and practical problems	number (thousands,	Interpret negative	
	Comparing amounts.		number facts to solve	involving these ideas.	hundreds, tens, and ones).	numbers in context.	
			problems.	Ü	, ,	Round any number up to	
					Order and compare	1 000 000 to the nearest	
					numbers beyond 1000.	10, 100, 1000, 10 000 and	
					Round any number to the	100 000.	
					nearest 10, 100 or 1000		
					110010011000	Solve number problems	
					Solve number and	and practical problems	
					practical problems that	that involve all of the	
					involve all of the above	above.	
					and with increasingly large		
					positive numbers.		
			<u> </u>		<u> </u>		

	Block 2 Talk about measure and pattern	Block 2 Addition and Subtraction (Within 10)	Block 2 Addition and Subtraction	Block 2 Addition and Subtraction	Block 2 Addition and Subtraction	Block 2 Addition and Subtraction	Block 2 Four operations
Autumn Term	Compare mass, size and capacity. Explore, continue and create simple patterns.	Add and subtract one-digit to 10, including zero. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9.	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 Solve problems with addition and subtraction: * Using concrete objects and pictorial representations, including those involving numbers, quantities, and measures. * Applying their increasing knowledge of mental and written methods.	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 with up to three digits, using formal written methods of columnar addition and subtraction. Solve problems, including missing number facts, place value, and more complex addition and subtraction.	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve addition and subtraction two-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 (columnar addition and subtraction). Add and subtract numbers mentally with increasingly large numbers. Solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	Perform mental calculations, including with mixed operations and large numbers. Use their knowledge of the order of operations to carry out calculations involving the four operations. Solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why. Identify common factors, common multiples, and prime numbers. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. 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 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.
				Divide numbers up to 4
				digits by a two-digit
				number using the formal
				written method of short
				division where
				appropriate, interpreting
				remainders according to
				the context.
				Perform mental
				calculations, including
				with mixed operations and
				large numbers.
				Solve problems involving
				addition, subtraction,
Ε				multiplication, and
<u>e</u>				division.
Autumn Term				
돌				Use their knowledge of
돺				the order of operations to
A				carry out calculations
				involving the four
				operations.

Block 3 It's me 1, 2, 3	Block 3 Shape	Block 3 Shape	Block 3 Multiplication and Division	Block 3 Area	Block 3 Multiplication and Division	Block 3 and 4 Fractions
Find, subitise and count 1, 2 and 3. Find 1 more and 1 less. Composition of 1, 2 and 3.	Recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles. Recognise and name common 3-D shapes [for example, 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 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. Compare and sort common 2-D shapes and everyday objects. Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. Compare and sort common 3-D shapes and everyday objects.	Count from 0 in multiples of 4, 8, 50 and 100. Find 10 or 100 more or less than a given number. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers, using mental and progressing to formal written methods.	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares.	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors, and composite (nonprime) 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). 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 and divide numbers mentally drawing upon known facts. 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.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare and order fractions, including fractions > 1. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = 1/8]. Divide proper fractions by whole numbers [for example 1/3 ÷ 2 = 1/6].

Autumn Term			Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares, and cubes. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	

	Block 4		Block 4	Block 4	Block 5
	Circles and triangles		Multiplication and Division	Fractions	Converting units
	Identify, compare, and name circles and triangles. Find shapes in the environment.		Count in multiples of 6, 7, 9, 25 and 1000. Count backwards through zero to include negative numbers.	Identify, name, and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.
Autumn Term	environment. Describe position.		Recall multiplication and division facts for multiplication tables up to 12 × 12. 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. Recognise and use factor pairs and commutativity in mental calculations.	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]. Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	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 3 decimal places. Convert between miles and kilometres. Use, read, write, and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa.

Block 5			
1, 2, 3, 4, 5			
Find, subitise and represent 4 and 5.			
Find 1 more and 1 less.			
Composition of 4 and 5			
Composition of 1,2 3,4 and 5.			
Block 6 Shapes with 4 sides			
Identify, name and combine shapes with 4 sides.			
Shapes in the environment.			
Day and Night.			

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Block 1 Alive in 5!	Block 1 Place Value (within 20)	Block 1 Money	Block 1 Multiplication and Division	Block 1 Multiplication and Division	Block 1 Multiplication and Division	Block 1 Ratio
Spring Term	Introducing zero. Finding, subitising and representing 0 to 5. Finding 1 more and 1 less. Conceptual subitising to 5.	Count numbers to 20 in numerals. Identify and represent numbers using objects and pictorial representations. Read and write numbers from 1 to 20 in numerals and words. Given a number, identify one more and one less.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. 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.	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers of times one-digit numbers, using mental and progressing to formal written methods. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	Recall multiplication and division facts for multiplication tables up to 12 × 12. 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. Recognise and use factor pairs and commutativity in mental calculations. Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	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 and divide numbers mentally drawing upon known facts. 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 using their knowledge of factors and multiples, squares, and cubes. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation/use of percentages for comparison. Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

	Block 2 Mass and Capacity	Block 2 Addition and Subtraction (Within 20)	Block 2 Multiplication and Division	Block 2 Length and Perimeter	Block 2 Length and Perimeter	Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. Block 2 Fractions	Block 2 Algebra
Spring Term	Compare mass. Find balance. Explore and compare capacity.	Add and subtract one-digit and two-digit numbers to 20, including zero. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9.	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Measure, compare, add, and subtract lengths (m/cm/mm). Measure the perimeter of simple 2-D shapes.	Convert between different units of measure - for example, kilometre to metre. Estimate, compare and calculate different measures. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares.	Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	Use simple formulae. Generate and describe linear number sequences. Express missing number problems algebraically. Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combinations of two variables.

	Block 3	Block 3	Block 3	Block 3	Block 3	Block 3	Block 3
	Growing 6, 7 and 8	Place Value (within 50)	Length and Height	Fractions	Fractions	Decimals and	Decimals
						percentages	
Spring Term	Finding and representing 6, 7 and 8. Finding 1 more and 1 less. Composition of 6, 7 and 8. Making pairs – odd and even. Finding and making doubles to 8. Combing two groups. Conceptual subitising.	Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number. Count numbers to 50 in numerals; count in multiples of twos, fives and tens identify and represent numbers using objects and pictorial representations. Read and write numbers to 50 in numerals. Read and write numbers from 1 to 20 in numerals and words. Given a number, identify one more and one less.	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); to the nearest appropriate unit, using rulers. Compare and order lengths and record the results using >, < and =.	Count up and down in tenths. 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 write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small	Recognise and show, using diagrams, families of common equivalent fractions. Add and subtract fractions with the same denominator. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Solve simple measure and money problems involving fractions and decimals to	Read and write decimal numbers as fractions [for example, 0.71 = 71/100 Recognise and use thousandths and relate them to tenths, hundredths, and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order, and compare numbers with up to three decimal places. recognise the per cent symbol (%) and	Identify the value of each digit in numbers given to three decimal places. Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction. Recall and use equivalences between simple fractions, decimals, and percentages, including in different contexts.
Sprir		more and one less.		Recognise and show, using diagrams, equivalent fractions with small denominators. Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above.	two decimal places.	understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, and 4/5 and those fractions with a denominator of a multiple of 10 or 25.	

Exploring and comparing length. Ordering and sequencing time. Compare, describe, and solve practical problems for lengths and heights. Measure and begin to record lengths and heights. Compare and order mass, (kg/g): capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels. Compare and order mass, volume/capacity and record the results using >, < and =. Convert between different units of metric measure. In thundredths arise when dividing an object by one hundred and dividing tenths by ten. Recognise and write decimal equivalents of any number of tenths or hundredths. Compare and order mass, volume/capacity and record the results using >, < and =. Compare describe, and solve problems find funding tenths by ten. Measure and begin to record lengths and heights. Compare and order mass, volume/capacity and record the results using >, < and =. Compare describe, and solve problems find funding tenths by ten. Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to X, X and X. X and X. Round decimals with one decimal places. Measure and calculate the perimeter of composite rectilines rabages in centimeters and metres. Measure and calculate the perimeter of composite rectilines rabages in centimeters and metres. Calculate and compare the area of rectangles (including squares) and including using standard units to with decimal places. Calculate and compare the area of rectangles (including squares) and including using standard units of two decimal places. Calculate and compare the area of rectangles (including squares) and including using standard units of two decimal places. Calculate and compare the area of rectangles (including squares) and including using standard units of two decimal places. Calculate and compare the area of rectangles (including squares) and including using standard units of two decimal places. Calculate and compare the area of rectangles (including using standard uni		Block 4	Block 4	Block 4	Block 4	Block 4	Block 4	Block 4
Exploring and comparing length. Ordering and sequencing time. Compare describe, and solve practical problems for lengths and heights. Measure and begin to record lengths and heights. Measure and degin to record lengths and heights. Measure and order mass, volume/capacity and record the results using >, < and =. Compare and order mass, volume/capacity and record the results using >, < and =. Compare numbers with the same number of decimal places up to two decimal places. Solve simple measure and money problems involving fractions and decimals to two decimal places. Calculate and compare the area of rectangles including squares) and including squares and write, and including squares and money problems involving fractions and decimals to two decimal places. Calculate and compare the area of rectangles (minding squares) and including squares) and including squares and write, and including squares and money problems involving fractions. Compare numbers with the same number of decimal places. Solve simple measure and money problems involving fractions and decimals to two decimal places. Calculate and compare the area of rectangles (minding squares) and including squares and write decimal places. Calculate and compare the area of rectangles (minding squares) and including squares and write decimal places. Calculate and compare the area of rectangles (minding squares) and inc		Length, height	Length and Height	Mass, Capacity and	Mass and Capacity	Decimals	Percentage and area	Fractions, decimals,
Comparing length. Exploring and comparing height. Ordering and sequencing time. Measure and begin to record lengths and heights. Ordering and sequencing time. Measure and begin to record lengths and heights. Ordering and sequencing time. Draw in the sequencing time. Measure and begin to record lengths and heights. Compare and order mass, volume/capacity and record the results using >, < and =. Compare and order mass, volume/capacity and record the results using >, < and =. Draw in the sequencing time and sequencing time. Draw in the sequencing time that bunderdths, arise when dividing an object by one hundred and dividing tenths by ten. Draw in the sequencing time that bundredths, and points. Recognise and write decimal enths or hundredths. Draw in the sequencing time. Draw in the sequencing time that by ten. Draw in the sequencing time that bundredths arise when dividing an object by one hundred and dividing tenths by ten. Draw in the sequencing time. Draw in the sequenci		and time		Temperature				and percentages
(m2) and estimate the area of irregular shapes. Estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water].	Soring Term	Exploring and comparing length. Exploring and comparing height. Ordering and sequencing time.	Compare, describe, and solve practical problems for lengths and heights. Measure and begin to record	Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels. Compare and order mass, volume/capacity and record the results using >,	Measure, compare, add, and subtract mass (kg/g) and volume/capacity	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to ¼, ½ and ¾. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places. Solve simple measure and money problems involving fractions and decimals to	Convert between different units of metric measure. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds, and pints. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. Estimate volume [for example, using blocks to build cuboids] and capacity [for example,	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction. Recall and use equivalences between simple fractions, decimals, and percentages, including in different

	Block 5 Building 9 and 10	Block 5 Mass and Volume		Block 5 Statistics	Block 5 Area, perimeter, and volume
	Finding, comparing and representing 9 and 10.	Compare, describe, and solve practical problems for mass/weight and capacity and volume.		Complete, read and interpret information in tables, including timetables.	Recognise that shapes with the same areas can have different perimeters and vice versa.
	Conceptual subitising to 10. Finding 1 more and 1 less.	Measure and begin to record mass/weight, capacity, and volume.		Solve comparison, sum, and difference problems using information presented in a line graph.	Recognise when it is possible to use formulae for area and volume of shapes.
	Composition to 10. Number bonds to 10				Calculate the area of parallelograms and triangles.
	Finding and making doubles to 10.				Calculate, estimate, and compare volume of cubes and cuboids using
Spring Term	Exploring odd and even.				standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units.
Sp	Block 6 Explore 3-D shape				Block 6 Statistics
	Recognise and name 3D shapes. Find 2D shapes within 3D shapes.				Interpret and construct pie charts and line graphs and use these to solve problems.
	Use 3D shapes for tasks.				Calculate and interpret the mean as an average.
	Find 3D shapes in the environment.				
	Identify, copy and continue patterns.				
	Patterns in the environment.				

		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Block 1	Block 1	Block 1	Block 1	Block 1	Block 1	Block 1
		To 20 and beyond	Multiplication and Division	Fractions	Fractions	Decimals	Shape	Shape
		•	•				·	•
		Build numbers	Solve one-step problems	Recognise, find, name,	Add and subtract fractions	Count up and down in	Distinguish between	Draw 2-D shapes using
		beyond 10.	involving multiplication and	and write fractions 1/3,	with the same	hundredths; recognise	regular and irregular	given dimensions and
			division, by calculating the	¼, 2/4 and ¾ of a length,	denominator within one	that hundredths arise	polygons based on	angles.
		Continue patterns	answer using concrete objects,	shape, set of objects or	whole [for example, 5/7 +	when dividing an object	reasoning about equal	
		beyond 10.	pictorial representations, and	quantity.	1/7 = 6/7.	by one hundred and	sides and angles.	Compare and classify
		Manhal agustina	arrays with the support of the	Danagaina tha	Calve muchlemes that	dividing tenths by ten.	Usa tha mususutisa af	geometric shapes based
		Verbal counting beyond 20.	teacher.	Recognise the equivalence of ½ and 2/4.	Solve problems that involve all of the above.	Recognise and write	Use the properties of rectangles to deduce	on their properties and sizes.
		beyond 20.		equivalence of 72 and 2/4.	involve all of the above.	decimal equivalents of any	related facts and find	31263.
		Verbal counting		Write simple fractions for		number of tenths or	missing lengths and	Illustrate and name parts
		patterns.		example, ½ of 6 = 3.		hundredths.	angles.	of circles, including radius,
								diameter and
						Recognise and write	Identify 3-D shapes,	circumference and know
						decimal equivalents to ¼,	including cubes and other	that the diameter is twice
						½ and ¾.	cuboids, from 2-D	the radius.
	_					Davind danimala with an	representations.	December describe and
	ern					Round decimals with one decimal place to the	Know angles are	Recognise, describe, and build simple 3-D shapes,
	r T					nearest whole number.	measured in degrees:	including making nets.
	Summer Term						estimate and compare	moraum g mammig me to:
	E					Compare numbers with	acute, obtuse, and reflex	Find unknown angles in
	S					the same number of	angles.	any triangles,
						decimal places up to two		quadrilaterals, and regular
						decimal places.	Draw given angles and	polygons.
						Salva simple measure and	measure them in degrees.	Pocognico angles where
						Solve simple measure and money problems involving	Identify	Recognise angles where they meet at a point, are
						fractions and decimals to	* Angles at a point and	on a straight line, or are
						two decimal places.	one whole turn (total	vertically opposite, and
						·	360°).	find missing angles.
							* Angles at a point on a	
							straight line and 1/2 a	
							turn (total 180°).	
							* Other multiples of 90°	
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	Block 2 How many now?	Block 2 Fractions	Block 2 Time	Block 2 Money	Block 2 Money	Block 2 Position and Direction	Block 2 Position and Direction
				-	-		
	Adding more - How many did I add? Taking away - How many did I take away?	Recognise, find, and name a half as one of two equal parts of an object, shape, or quantity. Recognise, find, and name a quarter as one of four equal parts of an object, shape, or quantity.	Compare and sequence intervals of time. 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. Know the number of minutes in an hour and the number of hours in a day.	Add and subtract amounts of money to give change, using both £ and p in practical contexts	Estimate, compare and calculate different measures, including money in pounds and pence.	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). Draw and translate simple shapes on the coordinate plane and reflect them in the axes.
Summer Term							

	Block 3 Manipulate,	Block 3 Position and Direction	Block 3 Statistics	Block 3 Time	Block 3 Time	Block 3 Decimals	
	compose and decompose	Position and Direction	Statistics	Time	Time	Decimals	
Summer Term	Select shapes for a purpose. Rotate and manipulate shapes. Explain shape arrangements. Compose and decompose shapes. Copy 2-D shape pictures. Find 2-D shapes within 3-D shapes.	Describe position, direction, and movement, including whole, half, quarter, and three-quarter turns.	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. 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.	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds, minutes, and hours. Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, and midnight. Know the number of seconds in a minute and the number of days in each month, year, and leap year. Compare durations of events [for example to calculate the time taken by particular events or tasks].	Convert between different units of measure for example hour to minute. Estimate, compare and calculate different measures. 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.	Read and write decimal numbers as fractions [for example, 0.71 = 71/100] Recognise and use thousandths and relate them to tenths, hundredths, and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order, and compare numbers with up to three decimal places. Use all four operations to solve problems involving measure [for example, money].	

	Block 4	Block 4	Block 4	Block 4	Block 4	Block 4	
	Sharing and	Place Value (within 100)	Position and Direction	Shape	Shape	Negative Numbers	
	grouping						
Summer Term	_	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count numbers to 100 in numerals; count in multiples of twos, fives, and tens. Identify and represent numbers using objects and pictorial representations. Read and write numbers to 100 in numerals. Read and write numbers from 1 to 20 in numerals and words. Given a number, identify one more and one less.	Order and arrange combinations of mathematical objects in patterns and sequences. 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 anticlockwise).	Draw 2-D shapes. Make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. Recognise angles as a property of shape or a description of a turn. 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 horizontal and vertical lines and pairs of perpendicular and parallel lines.	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientation. Identify acute and obtuse angles and compare and order angles up to two right angles by size. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Count forwards and backwards with positive and negative whole numbers, including through zero.	

	Block 5	Block 5	Block 5	Block 5	Block 5	
	Visualise, build	Money	Statistics	Statistics	Converting Units	
	and map					
	Identify units of	Recognise and know the value	Interpret and present data	Interpret and present	Convert between different	
	repeating patterns.	of different denominations of	using bar charts,	discrete and continuous	units of metric measure.	
	Finaless and supple	coins and notes.	pictograms, and tables.	data using appropriate	Lindoustond and	
	Explore and create own pattern rules.		Solve one-step and two-	graphical methods, including bar charts and	Understand and use approximate equivalences	
	own pattern rules.		step questions [for	time graphs.	between metric units and	
	Replicate and build		example, 'How many	time graphs:	common imperial units	
	scenes and		more?' and 'How many	Solve comparison, sum,	such as inches, pounds,	
	constructions.		fewer?'] using information	and difference problems	and pints.	
			presented in scaled bar	using information		
	Visualise from		charts and pictograms and	presented in bar charts,	Use all four operations to	
	different positions.		tables.	pictograms, tables, and other graphs.	solve problems involving measure [for example,	
	Describe positions.			other graphs.	length, mass, volume,	
	Describe positions.				money] using decimal	
	Give instructions to				notation, including	
_	build.				scaling.	
ern						
Summer Term	Explore mapping.				Solve problems involving	
Ĕ					converting between units	
μn					of time.	
S						

	Block 6	Block 6		Block 6	Block 6	
	Make Connections	Time		Position and Direction	Volume	
		12				
	Deepen	Compare, describe, and solve		Describe positions on a 2-	Convert between different	
	understanding.	practical problems for time.		D grid as coordinates in	units of metric measure.	
	_	·		the first quadrant.		
	Patterns and	Measure and begin to record			Understand and use	
	relationships	time (hours, minutes, seconds).		Describe movements	approximate equivalences	
				between positions as	between metric units and	
		Sequence events in		translations of a given unit	common imperial units	
		chronological order using		to the left/right and	such as inches, pounds,	
		language [for example, before		up/down.	and pints.	
		and after, next, first, today,				
		yesterday, tomorrow, morning,		Plot specified points and	Use all four operations to	
		afternoon, and evening].		draw sides to complete a	solve problems involving	
		December and use language		given polygon.	measure [for example,	
_		Recognise and use language relating to dates, including days			length, mass, volume, money] using decimal	
rm		of the week, weeks, months,			notation, including	
Te		and years.			scaling.	
neı		and years.			Scaling.	
Summer Term		Tell the time to the hour and			Measure and calculate the	
Su		half past the hour and draw the			perimeter of composite	
		hands on a clock face to show			rectilinear shapes in	
		these times.			centimetres and metre.	
					Calculate and compare	
					the area of rectangles	
					(including squares) and	
					including using standard	
					units, square centimetres	
					(cm2) and square metres	
					(m2) and estimate the	
					area of irregular shapes.	
					Estimate volume [for	
					example, using blocks to	
					build cuboids] and	
					capacity [for example,	
					using water].	
					23B Mater 1.	
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