

How do we learn Maths at Levendale Primary School?

Mastering Number

Since Autumn 2021, across Reception and KS1, we have implemented an exciting Mastering Number programme offered by the National Centre for Excellence in the Teaching of Mathematics (NCETM) and the Maths Hubs Network. This project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number. Attention will be given to key knowledge and understanding needed in Reception, and progression through KS1 to support success in the future.

The Mastering Number sessions are short, daily sessions of 10 to 15 minutes in addition to children's daily maths sessions.

At Levendale, we decided to implement this programme in school with the intention of strengthening our children's understanding of early number. Our aim is to provide our children with the automaticity, rapid recall and confidence with basic number facts e.g. subitising, number bonds within 20, odd and even, addition and subtraction, enabling our children to enter KS2 with these key fundamental strategies secure in their long-term memory.

Mastering Number overview: Reception

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
1 Children will:	<ul style="list-style-type: none"> perceptually subitise within 3 identify sub-groups in larger arrangements create their own patterns for numbers within 4 practise using their fingers to represent quantities which they can subitise experience subitising in a range of contexts, including temporal patterns made by sounds. 	<ul style="list-style-type: none"> relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting have opportunities to develop an understanding that anything can be counted, including actions and sounds explore a range of strategies which support accurate counting. 	<ul style="list-style-type: none"> see that all numbers can be made of 1s compose their own collections within 4. 	<ul style="list-style-type: none"> understand that sets can be compared according to a range of attributes, including by their numerosity use the language of comparison, including 'more than' and 'fewer than' compare sets 'just by looking'.
2 Children will:	<ul style="list-style-type: none"> continue from first half-term subitise within 5, perceptually and conceptually, depending on the arrangements. 	<ul style="list-style-type: none"> continue to develop their counting skills explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand begin to count beyond 5 begin to recognise numerals, relating these to quantities they can subitise and count. 	<ul style="list-style-type: none"> explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot explore the composition of numbers within 5. 	<ul style="list-style-type: none"> compare sets using a variety of strategies, including 'just by looking', by subitising and by matching compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
3 Children will:	<ul style="list-style-type: none"> increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part experience patterns which show a small group and '1 more' continue to match arrangements to finger patterns. 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond continue to develop object counting skills, using a range of strategies to develop accuracy continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 order numbers, linking cardinal and ordinal representations of number. 	<ul style="list-style-type: none"> continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 explore the composition of 6, linking this to familiar patterns, including symmetrical patterns begin to see that numbers within 10 can be composed of '5 and a bit'. 	<ul style="list-style-type: none"> continue to compare sets using the language of comparison, and play games which involve comparing sets continue to compare sets by matching, identifying when sets are equal explore ways of making unequal sets equal.
4 Children will:	<ul style="list-style-type: none"> explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'. 	<ul style="list-style-type: none"> continue to consolidate their understanding of cardinality, working with larger numbers within 10 become more familiar with the counting pattern beyond 20. 	<ul style="list-style-type: none"> explore the composition of odd and even numbers, looking at the 'shape' of these numbers begin to link even numbers to doubles begin to explore the composition of numbers within 10. 	<ul style="list-style-type: none"> compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.
5 Children will:	<ul style="list-style-type: none"> continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 be encouraged to identify when it is appropriate to count and when groups can be subitised. 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond, including counting from different starting numbers continue to develop confidence and accuracy in both verbal and object counting. 	<ul style="list-style-type: none"> explore the composition of 10. 	<ul style="list-style-type: none"> order sets of objects, linking this to their understanding of the ordinal number system.
6	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			

Mastering Number overview: Year One

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison	Addition and subtraction/ Number facts
1 Children will:	<ul style="list-style-type: none"> revisit subitising within 5 using perceptual subitising practise conceptual subitising of bigger numbers as they become more familiar with patterns made by the numbers 5–10. 	<ul style="list-style-type: none"> explore the linear number system within 10, looking at a range of ordinal representations explore the link between the 'staircase' pattern and a number track. 	<ul style="list-style-type: none"> focus on the composition of numbers within 10, with a particular emphasis on the composition of numbers 6, 7, 8 and 9 as '5 and a bit', as well as exploring the composition of numbers 5 and 6 in-depth explore the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have 'an extra 1' – they will link this to the 'shape' of these numbers. 		Although children will not be looking at number bonds expressed as equations, their work on the composition of numbers within 10 will be developing their knowledge of number bonds.
2 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of. 	<ul style="list-style-type: none"> review the linear number system to 10 as they compare numbers. 	<ul style="list-style-type: none"> continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers explore the composition of 10, developing a systematic approach to finding pairs that sum to 10. 	<ul style="list-style-type: none"> revisit what is meant by 'comparing' and see that quantities can be compared according to different attributes, including numerosity. 	As above.
3 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of. 		<ul style="list-style-type: none"> review the composition of numbers within 10, linking these to part-part-whole representations practise recalling missing parts for numbers within 10. 	<ul style="list-style-type: none"> compare numbers within 10, linking this to their understanding of the linear system use the inequality symbol to create expressions, e.g. $7 > 2$, and use the language of 'greater than' and 'less than' to reason about inequalities, drawing on their knowledge of the composition of numbers, e.g. Is this true or false? 3 and 2 is less than 4. 	<ul style="list-style-type: none"> develop their recall of number bonds within 10, through the use of exercises which use written numerals but not the symbols +, -, or =.
4 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of. 	<ul style="list-style-type: none"> review the linear number system to 10, looking at a range of representations, including a number line explore the use of 'midpoints' to enable them to identify the location of other numbers. 	<ul style="list-style-type: none"> review the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have an 'odd 1'. 		<ul style="list-style-type: none"> solve a range of subtraction problems using knowledge of part-part-whole relationships. use their understanding of the composition of even and odd numbers to add and subtract 2 to or from odd or even numbers within 10. continue to develop their recall of bonds within 10, through the use of exercises which do NOT involve written equations, such as $4 + 3 = ?$
5 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of. conceptually subitise numbers within 20 as they become more familiar with the composition of numbers within 20. 	<ul style="list-style-type: none"> explore the linear number system to 20, looking at a range of representations, including a number line. explore the use of 'midpoints' to enable them to identify the location of other numbers. 	<ul style="list-style-type: none"> explore the composition of the numbers 11–20, seeing representations which show the structure of these numbers as 'ten and a bit'. review the composition of even numbers and focus on doubles. 	<ul style="list-style-type: none"> compare numbers within 20 using the inequality symbol. 	<ul style="list-style-type: none"> develop their fluency in additive relationships within 10, using a range of activities and games draw on their knowledge of the composition of numbers to complete written equations revisit strategies for addition and subtraction within 10 and apply these to a range of questions, including written equations.
6 Children will:	<ul style="list-style-type: none"> continue to use conceptual subitising, especially when using a rekenrek. 		<ul style="list-style-type: none"> apply their knowledge of the composition of numbers, to calculations within 10 and 20. 	<ul style="list-style-type: none"> continue to compare numbers within 20, including questions which use the symbols +, <, >, or =, such as: True or false? $10 + 4 < 14$ $10 + 4 = 14$ $10 + 4 > 14$ 	<ul style="list-style-type: none"> continue to practise recalling additive facts within 20, applying their knowledge of the composition of numbers within 20 and strategies within 10.

Mastering Number overview: Year Two

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison	Addition and subtraction/ Number facts
1 Children will:	<ul style="list-style-type: none"> develop conceptual subitising skills as they become more familiar with patterns made by numbers within 10 and understand their composition use perceptual and conceptual subitising when using a rekenrek. 	<ul style="list-style-type: none"> explore the linear number system within 10, looking at a range of representations compare number tracks and number lines and explore the use of 'midpoints' to enable them to identify the location of other numbers. 	<ul style="list-style-type: none"> focus on the composition of numbers within 10, with a particular emphasis on the composition of numbers 6, 7, 8 and 9 as '5 and a bit', as well as exploring the composition of numbers 5 and 6 in-depth explore the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have 'an extra 1' – they will link this to the 'shape' of these numbers. 		<ul style="list-style-type: none"> link their growing understanding of the composition of numbers within 10 to the related additive facts, including adding 2 to an odd or even number practise recalling facts in a variety of ways, including through solving simple picture problems and completing equations with a missing sum or addend,
2 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of. 	<ul style="list-style-type: none"> review the linear number system as they compare numbers. 	<ul style="list-style-type: none"> continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers 	<ul style="list-style-type: none"> compare numbers within 10, linking this to their understanding of the linear number system use the inequality symbols to create expressions, e.g. $7 > 2$, and use the language of 'greater than' and 'less than' draw on their knowledge of number bonds to answer questions in the form: True or false? $5 + 3 > 7$ 	<ul style="list-style-type: none"> continue to practise recalling additive facts for numbers within 10, using a range of equations, games and picture problems.
3 Children will:	<ul style="list-style-type: none"> continue to practise conceptually subitising numbers they have already explored the composition of, including 'teen' numbers when they have reviewed the composition of 11–19. 		<ul style="list-style-type: none"> review the composition of 11 to 19 as 'ten and a bit' and explore ways to represent this. 		<ul style="list-style-type: none"> focus on number bonds within 10 presented in the part-part-whole structure, including identifying a missing 'part' and relating this to subtraction equations review strategies for adding 1 and 2 to odd and even numbers to subtraction facts presented in different ways apply their knowledge of the composition of 11–19 to calculations in which 10 is a part apply their knowledge of composition to facts involving 3 addends.
4 Children will:	<ul style="list-style-type: none"> continue to conceptually subitise the numbers 11–19 using a range of representations, which expose the structure of these numbers as 'ten and a bit'. 	<ul style="list-style-type: none"> revisit the structure of the linear number system within 20, making links between the midpoints of 5 and 10, and 15. 	<ul style="list-style-type: none"> review the composition of odd and even numbers, linking this to doubles and near doubles. 	<ul style="list-style-type: none"> continue to compare numbers within 20, including questions which use the symbols +, <, >, or =, such as: Write the correct symbol: $10 + 4 \square 15$ $10 + 4 \square 14$ $10 + 4 \square 13$ 	<ul style="list-style-type: none"> draw on their knowledge of the linear number system and apply this to calculations involving 1 more and 1 less, use their understanding of the composition of odd and even numbers to find doubles and near doubles apply known facts to calculations involving larger numbers, e.g. $5 + 2$, $15 + 2$.
5 Children will:	<ul style="list-style-type: none"> revisit previous activities which develop their subitising skills. 	<ul style="list-style-type: none"> review the linear number system to 100, applying their knowledge of midpoints to place numbers on a structured number line – they will identify the multiples of 10 that come before and after a given number. 	<ul style="list-style-type: none"> revisit previous activities which develop their understanding of the composition of numbers within 10 and 20. 	<ul style="list-style-type: none"> reason about equalities and inequalities using equations and answering questions, such as: True or false? $5 + 3 = 6 + 2$ $9 + 4 > 9 + 5$ $9 + 6 < 10 + 5$ This will help them become fluent in the use of the inequality symbol as well as practising their number bond knowledge. 	<ul style="list-style-type: none"> become fluent in a range of strategies involving calculations within 20, using 'make 10' strategies to add, and subtracting through the tens boundary practise recalling number bonds through a range of activities and games which will encourage them to reason about sums and differences.
6 Children will:	As above.		As above.		<ul style="list-style-type: none"> develop their fluency in additive relationships within 20, using a range of activities and games and revisiting previously taught strategies where necessary.

The Maths Curriculum in Early Years

	What does this look like in EYFS?
Intent	Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.
Implementation	Children in Nursery are given lots of exposure to maths in real-life situations; counting out plates and cups in the home corner, matching blocks to shadows when tidying. Correct terminology is introduced for example when teaching length, height, weight or size. Children in Reception are taught maths using the White Rose Maths approach to teaching in order to develop children's skills and proficiency in number and numerical patterns, shape, measure, and spatial thinking. Additional teaching for Mastery is followed from NCETM. Opportunities are provided within the classroom and continuous provision, for children to use their maths skills and apply them to real life situations.
Impact	It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Assessment in Maths in the Early Years

The Early Learning Goals are the end of Reception Year statements that all of our children will be assessed against. Those children who meet all criteria under each area of development are said to have 'met' the early learning goal and working at 'age-related' expectations. Parents are notified about this at the end of Reception Year.

ELG: Number	Children at the expected level of development will: - Have a deep understanding of number to 10, including the composition of each number; Subitise (recognise quantities without counting) up to 5; - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
ELG: Numerical Patterns	Children at the expected level of development will: - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

White Rose Maths Approach

In Reception, we teach maths using the White Rose Maths approach to teaching in order to develop children's skills and proficiency in number and numerical patterns, shape, measure, and spatial thinking.

		Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number	Getting to know you			Just like me! Match and sort, compare amounts			It's me 1, 2, 3! Representing 1, 2, and 3 Comparing 1, 2, and 3 Composition of 1, 2, and 3			Light and Dark Representing numbers to 5 One more, one less		
	Measur				Comparing size, mass and capacity exploring pattern			Circles and triangles Positional language			Shapes with 4 sides time		

Spring	Number	Alive in 5! Introducing zero Comparing numbers to 5 Composition of 4 and 5	Growing 6, 7, 8 Making pairs Combining 2 groups	Building 9 and 10 Comparing numbers to 10 Bonds to 10	Consolidation
	Measur	Compare mass (2) Compare capacity (2)	Length and time Height	3D shape Pattern (2)	
Summer	Number	To 20 and Beyond Building numbers beyond 10 Comparing numbers beyond 10	First, then, now Adding more Taking away	Find my pattern Doubling Sharing & Grouping Even and Odd	On the Move Deepening understanding Patterns and relationships
	Measure,	Spatial reasoning (1) Match, rotate, manipulate	Spatial reasoning (2) Compose and decompose	Spatial reasoning (3) Visualise and build	Spatial reasoning (4) Mapping

The Levendale Maths Curriculum

We cover the statutory elements of the National Curriculum 2014, using a White Rose Maths approach to teaching in order to develop children's skills and proficiency in:

- number
- measurement
- geometry
- statistics
- algebra

In each child's mathematical journey at Levendale, we endeavour to ensure mathematical challenge within a supportive environment where we strive to Be the Best We Can Be.

Curriculum coverage across Y1-Y6

Year 1

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value (within 10)					Number: addition and subtraction (within 10)					Geometry: shape	Consolidation
Spring	Number: place value (within 20)			Number: addition and subtraction (within 20)			Number: place value (within 50)		Measurement: length and height		Measurement: weight and volume	
Summer	Number: multiplication and division			Number: fractions		Geometry: position and	Number: place value (within 100)		Measurement: money	Measurement: time		Consolidation

Year 2

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value				Number: addition and subtraction					Geometry: shape		
Spring	Measurement: money		Number: multiplication and division				Measurement: length and height		Measurement: mass, capacity and temperature			
Summer	Number: fractions			Measurement: time		Statistics		Geometry: position and direction		Consolidation		

Year 3

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value			Number: addition and subtraction				Number: multiplication and division				
Spring	Number: multiplication and division			Measurement: length and perimeter			Number: fractions			Measurement: mass, capacity and temperature		
Summer	Number: fractions		Measurement: money		Measurement: time			Geometry: shape		Statistics		Consolidation

Year 4

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value				Number: addition and subtraction			Measurement: area	Number: multiplication and division			Consolidation
Spring	Number: multiplication and division			Measurement: length and perimeter		Number: fractions				Number: decimals		
Summer	Number: decimals		Measurement: money		Measurement: time		Consolidation	Geometry: shape		Statistics	Geometry: position and direction	

Year 5

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value			Number: addition and subtraction		Number: multiplication and division			Number: fractions A			
Spring	Number: multiplication and division			Number: fractions B		Number: decimals and percentages			Measurement: perimeter and area		Statistics	
Summer	Geometry: shape			Geometry: position and direction		Number: decimals			Number: negative	Measurement: converting units		Measurement:

Year 6

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12
Autumn	Number: place value		Number: four operations					Number: fractions A		Number: fractions B		Measurement:
Spring	Number: ratio		Number: algebra		Number: decimals		Number: fractions, decimals and percentages		Measurement: perimeter, area and volume		Statistics	
Summer	Geometry: shape			Geometry: position	Themed projects, consolidation and problem solving							

Skills progression across Y1-Y6

Place value

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	<ul style="list-style-type: none"> 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 <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward <p>Autumn 1</p>	<ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number <p>Autumn 1 Autumn 3</p>	<ul style="list-style-type: none"> count in multiples of 6, 7, 9, 25 and 1000 count backwards through zero to include negative numbers <p>Autumn 1 Autumn 4</p>	<ul style="list-style-type: none"> 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 <p>Autumn 1</p>	
Place Value: Represent	<ul style="list-style-type: none"> 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. <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> read and write numbers to at least 100 in numerals and in words identify, represent and estimate numbers using different representations, including the number line <p>Autumn 1</p>	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words <p>Autumn 1</p>	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations 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 <p>Autumn 1</p>	<ul style="list-style-type: none"> read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit read Roman numerals to 1000 (M) and recognise years written in Roman numerals. <p>Autumn 1</p>	<ul style="list-style-type: none"> read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit <p>Autumn 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value : Use PV and Compare	<ul style="list-style-type: none"> given a number, identify one more and one less <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> recognise the place value of each digit in a two-digit number (tens, ones) compare and order numbers from 0 up to 100; use <, > and = signs <p>Autumn 1</p>	<ul style="list-style-type: none"> recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 <p>Autumn 1</p>	<ul style="list-style-type: none"> find 1000 more or less than a given number recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) order and compare numbers beyond 1000 <p>Autumn 1</p>	<ul style="list-style-type: none"> (read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit <p>Autumn 1</p>	<ul style="list-style-type: none"> (read, write), order and compare numbers up to 10 000 000 and determine the value of each digit <p>Autumn 1</p>
Place Value: Problems & Rounding		<ul style="list-style-type: none"> use place value and number facts to solve problems. <p>Autumn 1</p>	<ul style="list-style-type: none"> solve number problems and practical problems involving these ideas <p>Autumn 1</p>	<ul style="list-style-type: none"> round any number to the nearest 10, 100 or 1000 solve number and practical problems that involve all of the above and with increasingly large positive numbers <p>Autumn 1</p>	<ul style="list-style-type: none"> interpret negative numbers in context round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 solve number problems and practical problems that involve all of the above <p>Autumn 1</p>	<ul style="list-style-type: none"> round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above <p>Autumn 1</p>

Addition and subtraction

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Recall, Represent, Use	<ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs represent and use number bonds and related subtraction facts within 20 <p>Autumn 2 Spring 1</p>	<ul style="list-style-type: none"> recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems <p>Autumn 2</p>	<ul style="list-style-type: none"> estimate the answer to a calculation and use inverse operations to check answers <p>Autumn 2</p>	<ul style="list-style-type: none"> estimate and use inverse operations to check answers to a calculation <p>Autumn 2</p>	<ul style="list-style-type: none"> use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy <p>Autumn 2</p>	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Calculations	<ul style="list-style-type: none"> add and subtract one-digit and two-digit numbers to 20, including zero <p>Autumn 2 Spring 1</p>	<ul style="list-style-type: none"> add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers <p>Autumn 2</p>	<ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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 <p>Autumn 2</p>	<ul style="list-style-type: none"> add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate <p>Autumn 2</p>	<ul style="list-style-type: none"> 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 <p>Autumn 2</p>	<ul style="list-style-type: none"> 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 <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Solve Problems	<ul style="list-style-type: none"> solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ <p>Autumn 2 Spring 1</p>	<ul style="list-style-type: none"> solve problems with addition and subtraction: <ul style="list-style-type: none"> using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods <p>Autumn 2</p>	<ul style="list-style-type: none"> solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>Autumn 2</p>	<ul style="list-style-type: none"> solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why <p>Autumn 2</p>	<ul style="list-style-type: none"> solve addition and subtraction multi-step 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 <p>Autumn 2</p>	<ul style="list-style-type: none"> solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why <p>Autumn 2</p>

Multiplication and division

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Recall, Represent, Use		<ul style="list-style-type: none"> 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 <p style="text-align: center;">Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables <p style="text-align: center;">Autumn 3</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> 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 (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) <p style="text-align: center;">Autumn 4</p>	<ul style="list-style-type: none"> 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. <p style="text-align: center;">Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Calculations		<ul style="list-style-type: none"> calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs <p style="text-align: center;">Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Autumn 3 Spring 1</p>	<ul style="list-style-type: none"> multiply two-digit and three-digit numbers by a one-digit number using formal written layout <p style="text-align: center;">Spring 1</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Autumn 4 Spring 1 Summer 1</p>	<ul style="list-style-type: none"> 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 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 <p style="text-align: center;">Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Solve Problems	<ul style="list-style-type: none"> 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 <p>Summer 1</p>	<ul style="list-style-type: none"> solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> 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 <p>Spring 1</p>	<ul style="list-style-type: none"> 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 <p>Spring 1</p>	<ul style="list-style-type: none"> 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 <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> solve problems involving addition, subtraction, multiplication and division <p>Autumn 2</p>
Multiplication & Division: Combined Operations					<ul style="list-style-type: none"> solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign <p>Spring 1</p>	<ul style="list-style-type: none"> use their knowledge of the order of operations to carry out calculations involving the four operations <p>Autumn 2</p>

Fractions, Decimals & Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Recognise and Write	<ul style="list-style-type: none"> 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 <p>Summer 2</p>	<ul style="list-style-type: none"> recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity <p>Spring 4</p>	<ul style="list-style-type: none"> 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 denominators <p>Spring 5</p>	<ul style="list-style-type: none"> count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. <p>Spring 3</p>	<ul style="list-style-type: none"> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] <p>Spring 2</p>	
Fractions: Compare		<ul style="list-style-type: none"> Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ <p>Spring 4</p>	<ul style="list-style-type: none"> recognise and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions, and fractions with the same denominators <p>Summer 1</p>	<ul style="list-style-type: none"> recognise and show, using diagrams, families of common equivalent fractions <p>Spring 3</p>	<ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number <p>Spring 2</p>	<ul style="list-style-type: none"> use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions > 1 <p>Autumn 3</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Calculations		<ul style="list-style-type: none"> write simple fractions for example, $\frac{1}{2}$ of 6 = 3 <p style="text-align: center;">Spring 4</p>	<ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] <p style="text-align: center;">Summer 1</p>	<ul style="list-style-type: none"> add and subtract fractions with the same denominator <p style="text-align: center;">Spring 3</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Spring 3</p>	<ul style="list-style-type: none"> 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, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$] <p style="text-align: center;">Autumn 3</p>
Fractions: Solve Problems			<ul style="list-style-type: none"> solve problems that involve all of the above <p style="text-align: center;">Spring 5 Summer 1</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Spring 3</p>		

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Recognise and Write				<ul style="list-style-type: none"> recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ <p style="text-align: center;">Spring 4 Summer 1</p>	<ul style="list-style-type: none"> read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <p style="text-align: center;">Spring 3</p>	<ul style="list-style-type: none"> identify the value of each digit in numbers given to three decimal places <p style="text-align: center;">Spring 1</p>
Decimals: Compare				<ul style="list-style-type: none"> 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 <p style="text-align: center;">Summer 1</p>	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Spring 3</p>	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Calculations & Problems				<ul style="list-style-type: none"> 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 <p>Spring 4</p>	<ul style="list-style-type: none"> solve problems involving number up to three decimal places <p>Summer 1</p>	<ul style="list-style-type: none"> multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems which require answers to be rounded to specified degrees of accuracy <p>Spring 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages				<ul style="list-style-type: none"> solve simple measure and money problems involving fractions and decimals to two decimal places <p>Spring 3 Spring 4 Summer 1</p>	<ul style="list-style-type: none"> 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, and as a decimal solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$ and those fractions with a denominator of a multiple of 10 or 25 <p>Spring 3</p>	<ul style="list-style-type: none"> associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] recall and use equivalences between simple fractions, decimals and percentages, including in different contexts <p>Spring 1 Spring 2</p>

Ratio and proportion

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ratio and Proportion						<ul style="list-style-type: none"> • 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 of percentages [for example, of measures, and such as 15% of 360] and the 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. <p style="text-align: right;">Spring 6</p>

Algebra

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Algebra	<ul style="list-style-type: none"> • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ 	<ul style="list-style-type: none"> • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<ul style="list-style-type: none"> • solve problems, including missing number problems 				<ul style="list-style-type: none"> • 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. <p style="text-align: right;">Spring 3</p>

Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Using Measures	<ul style="list-style-type: none"> • compare, describe and solve practical problems for: <ul style="list-style-type: none"> ➢ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ➢ mass/weight [for example, heavy/light, heavier than, lighter than] ➢ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ➢ time [for example, quicker, slower, earlier, later] • measure and begin to record the following: <ul style="list-style-type: none"> ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds) <p style="text-align: center;">Spring 3 Spring 4 Summer 6</p>	<ul style="list-style-type: none"> • 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 • compare and order lengths, mass, volume/capacity and record the results using >, < and = <p style="text-align: center;">Spring 5 Summer 4</p>	<ul style="list-style-type: none"> • measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) <p style="text-align: center;">Spring 4 Summer 4</p>	<ul style="list-style-type: none"> • Convert between different units of measure [for example, kilometre to metre; hour to minute] • estimate, compare and calculate different measures <p style="text-align: center;">Autumn 3 Spring 2 Summer 3</p>	<ul style="list-style-type: none"> • convert between different units of metric measure [for example, kilometre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] • 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 <p style="text-align: center;">Summer 1 Summer 4 Summer 5</p>	<ul style="list-style-type: none"> • solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • 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 • convert between miles and kilometres <p style="text-align: center;">Spring 4</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money	<ul style="list-style-type: none"> • recognise and know the value of different denominations of coins and notes <p style="text-align: center;">Summer 5</p>	<ul style="list-style-type: none"> • 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 <p style="text-align: center;">Autumn 3</p>	<ul style="list-style-type: none"> • add and subtract amounts of money to give change, using both £ and p in practical contexts <p style="text-align: center;">Spring 2</p>	<ul style="list-style-type: none"> • estimate, compare and calculate different measures, including money in pounds and pence <p style="text-align: center;">Summer 2</p>	<ul style="list-style-type: none"> • use all four operations to solve problems involving measure [for example, money] <p style="text-align: center;">Summer 1</p>	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Time	<ul style="list-style-type: none"> sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] recognise and use language relating to dates, including days of the week, weeks, months and years tell the time to the hour and half past the hour and draw the hands on a clock face to show these times 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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] 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> solve problems involving converting between units of time 	<ul style="list-style-type: none"> 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
	Summer 6	Summer 3	Summer 2	Summer 3	Summer 4	Year 5 Summer 4

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area, Volume			<ul style="list-style-type: none"> measure the perimeter of simple 2-D shapes 	<ul style="list-style-type: none"> measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares 	<ul style="list-style-type: none"> 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 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] 	<ul style="list-style-type: none"> recognise that shapes with the same areas can have different perimeters and vice versa recognise when it is possible to use formulae for area and volume of shapes calculate the area of parallelograms and triangles calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³]
			Spring 4	Autumn 3 Spring 2	Autumn 5 Summer 5	Spring 5

Geometry

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2-D Shapes	<ul style="list-style-type: none"> recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] <p>Autumn 3</p>	<ul style="list-style-type: none"> 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 <p>Spring 3</p>	<ul style="list-style-type: none"> draw 2-D shapes <p>Summer 3</p>	<ul style="list-style-type: none"> 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 orientations <p>Summer 5</p>	<ul style="list-style-type: none"> distinguish between regular and irregular polygons based on reasoning about equal sides and angles. use the properties of rectangles to deduce related facts and find missing lengths and angles <p>Summer 2</p>	<ul style="list-style-type: none"> draw 2-D shapes using given dimensions and angles compare and classify geometric shapes based on their properties and sizes illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius <p>Summer 1</p>
Geometry: 3-D Shapes	<ul style="list-style-type: none"> recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] <p>Autumn 3</p>	<ul style="list-style-type: none"> 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 <p>Spring 3</p>	<ul style="list-style-type: none"> make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them <p>Summer 3</p>		<ul style="list-style-type: none"> identify 3-D shapes, including cubes and other cuboids, from 2-D representations <p>Summer 2</p>	<ul style="list-style-type: none"> recognise, describe and build simple 3-D shapes, including making nets <p>Summer 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Angles & Lines			<ul style="list-style-type: none"> 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 <p>Summer 3</p>	<ul style="list-style-type: none"> 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 <p>Summer 5</p>	<ul style="list-style-type: none"> know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees identify: <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90° <p>Summer 2</p>	<ul style="list-style-type: none"> find unknown angles in any triangles, quadrilaterals, and regular polygons recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles <p>Summer 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Position & Direction	<ul style="list-style-type: none"> describe position, direction and movement, including whole, half, quarter and three-quarter turns <p>Summer 3</p>	<ul style="list-style-type: none"> 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 anti-clockwise) <p>Spring 3 Summer 1</p>		<ul style="list-style-type: none"> describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon <p>Summer 6</p>	<ul style="list-style-type: none"> 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 <p>Summer 3</p>	<ul style="list-style-type: none"> 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 <p>Autumn 4</p>

Statistics

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Present and Interpret		<ul style="list-style-type: none"> interpret and construct simple pictograms, tally charts, block diagrams and simple tables <p style="text-align: center;">Spring 2</p>	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables <p style="text-align: center;">Spring 3</p>	<ul style="list-style-type: none"> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs <p style="text-align: center;">Summer 4</p>	<ul style="list-style-type: none"> complete, read and interpret information in tables, including timetables <p style="text-align: center;">Autumn 3</p>	<ul style="list-style-type: none"> interpret and construct pie charts and line graphs and use these to solve problems <p style="text-align: center;">Summer 3</p>
Statistics: Solve Problems		<ul style="list-style-type: none"> 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 <p style="text-align: center;">Spring 2</p>	<ul style="list-style-type: none"> solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables <p style="text-align: center;">Spring 3</p>	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs <p style="text-align: center;">Summer 4</p>	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in a line graph <p style="text-align: center;">Autumn 3</p>	<ul style="list-style-type: none"> calculate and interpret the mean as an average <p style="text-align: center;">Summer 3</p>