



SHOBNALL PRIMARY & NURSERY SCHOOL
MATHEMATICS PROGRAMME OF STUDY
YEAR 5 LONG TERM OVERVIEW



YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

Week	Unit	Lesson titles	Domain	National Curriculum Pupils should be taught to:	Government Guidance Ready-to-progress criteria
1	Unit 1- Place value within 100,000	Lesson 1 – Numbers to 10,000	Number- Number and place value	<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 (10,000). Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 	
		Lesson 2 – Rounding to the nearest 10,100 and 1,000	Number- Number and place value	<ul style="list-style-type: none"> Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (10, 100 and 1,000). 	
		Lesson 3 – 10,000s, 1,000s, 100s, 10s and 1s (1)	Number- Number and place value	<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. 	
		Lesson 5 – The number line to 100,000	Number- Number and place value	<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 (100,000). 	
2		Lesson 6 – Comparing and ordering number to 100,000	Number- Number and place value	<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 (100,000). 	
		Lesson 7 – Rounding numbers within 100,000	Number- Number and place value	<ul style="list-style-type: none"> Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000. 	
		Lesson 8 - Roman numerals to 10,000	Number- Number and place value	<ul style="list-style-type: none"> Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals. 	
		Unit 2 – Place value within 1,000,000	Lesson 1 – 100,000s, 10,000s, 1,000s, 100s, 10s and 1s (1)	Number- Number and place value	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

3		Lesson 3 – Number line 10 1,000,000	Number- Number and place value	<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. 	
		Lesson 4 – Comparing and ordering numbers to 1,000,000	Number- Number and place value	<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. 	
		Lesson 5 – Rounding numbers to a 1,000,000	Number- Number and place value	<ul style="list-style-type: none"> Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 	
		Lesson 6 – Negative numbers	Number- Number and place value	<ul style="list-style-type: none"> Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. 	
4		Lesson 7 – Counting in 10s, 100s, 1,000s, 10,000s	Number- Number and place value	<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. 	
		Lesson 8 – Number sequences	Number- Number and place value	<ul style="list-style-type: none"> Solve number problems and practical problems that involve all of the above. 	
5	Unit 3 – Addition and subtraction	Lesson 1 – Adding whole numbers with more than 4 digits (1)	Number- Addition and subtraction	<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). 	
		Lesson 2 – Adding whole numbers with more than 4 digits (2)	Number- Addition and subtraction	<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). 	
5		Lesson 3 – Subtracting whole numbers with	Number- Addition and subtraction	<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). 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

6		more than 4 digits (1)			
		Lesson 4 – Subtracting whole numbers with more than 4 digits (2)	Number- Addition and subtraction	<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). 	
		Lesson 5 – Using rounding to estimate and check answers	Number- Addition and subtraction	<ul style="list-style-type: none"> Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. 	
		Lesson 6 – Mental addition and subtraction (1)	Number- Addition and subtraction	<ul style="list-style-type: none"> Add and subtract numbers mentally with increasingly large numbers. 	
		Lesson 8 – Using inverse operations	Number- Addition and subtraction	<ul style="list-style-type: none"> Estimate and use inverse operations to check answers to a calculation. 	
7	Unit 4 – Graphs and tables	Lesson 1 – Interpreting tables	Statistics	<ul style="list-style-type: none"> Complete, read and interpret information in tables, including timetables. 	
		Lesson 2 – Two-way tables	Statistics	<ul style="list-style-type: none"> Complete, read and interpret information in tables, including timetables. 	
		Lesson 3 – Interpreting line graphs (1)	Statistics	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph. 	
		Lesson 4 – Interpreting line graphs (2)	Statistics	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph. 	
		Lesson 5 – Drawing line graphs	Statistics	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph. 	
	Unit 5 – Multiplication	Lesson 1 - Multiples	Number – Multiplication and division	<ul style="list-style-type: none"> Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. 	5MD–1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

8	<i>and division (1)</i>			<ul style="list-style-type: none"> Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. 	100 times the size, or 1 tenth or 1 hundredth times the size.
		Lesson 2 – Factors	Number – Multiplication and division	<ul style="list-style-type: none"> Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. 	5MD–2 Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.
		Lesson 3 – Prime numbers	Number – Multiplication and division	<ul style="list-style-type: none"> Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. 	5MD–3 Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.
		Lesson 4 – Using factors	Number – Multiplication and division	<ul style="list-style-type: none"> Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes 	5MD–4 Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.
		Lesson 5 – Squares	Number – Multiplication and division	<ul style="list-style-type: none"> Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³). Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. 	5G–2 Compare areas and calculate the area of rectangles (including squares) using standard units.
		Lesson 6 - Cubes	Number – Multiplication and division	<ul style="list-style-type: none"> Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³). Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. 	5NF–2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).
9		Lesson 7 – Inverse operations	Number – Multiplication and division	<ul style="list-style-type: none"> Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 8 – Multiplying whole numbers by 10,100 and 1,000	Number – Multiplication and division	<ul style="list-style-type: none"> Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
		Lesson 9 – multiplying whole numbers by 10, 100 and 1,000	Number – Multiplication and division	<ul style="list-style-type: none"> Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes 	
		Lesson 10 – Multiplying and dividing by multiples of 10, 100 and 1,000	Number – Multiplication and division	<ul style="list-style-type: none"> Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
10	Unit 6 – Measure – area and perimeter	Lesson 1- Measuring perimeter	Measurement	<ul style="list-style-type: none"> Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. 	
		Lesson 2 – Calculating perimeter (1)	Measurement	<ul style="list-style-type: none"> Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres 	
		Lesson 3 – Calculating perimeter (2)	Measurement	<ul style="list-style-type: none"> Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres 	
		Lesson 4 – Calculating area (1)	Measurement	<ul style="list-style-type: none"> 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. 	
11		Lesson 5 – Calculating area (2)	Measurement	<ul style="list-style-type: none"> 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. 	
		Lesson 6 – Comparing area	Measurement	<ul style="list-style-type: none"> Calculate and compare the area of rectangles (including squares), and including using standard 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

				units, square centimetres (cm ²) and square metres (m ²) and estimate the area of irregular shapes.	
	Lesson 7 – Estimating area	Measurement		<ul style="list-style-type: none"> 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. 	
12	Unit 7 – Multiplication and division (2)	Lesson 1 – Multiplying number up to 4-digit by a 1-digit number	Number – Multiplication and division	<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. 	
		Lesson 2 – Multiplying 2-digit numbers (1)	Number – Multiplication and division	<ul style="list-style-type: none"> Multiply and divide numbers mentally drawing upon known facts. 	
		Lesson 3 – Multiplying 2-digit numbers (2)	Number – Multiplication and division	<ul style="list-style-type: none"> Multiply and divide numbers mentally drawing upon known facts. 	
		Lesson 4 – Multiplying 2-digit numbers (3)	Number – Multiplication and division	<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 	
		Lesson 5 – Multiplying a 3-digit number by a 2-digit number	Number – Multiplication and division	<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. 	
1		Lesson 6 – Multiplying a 4-digit number by a 2-digit number	Number – Multiplication and division	<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. 	
		Lesson 7 – Dividing up to a 4-digit number by a 1-digit number (1)	Number – Multiplication and division	<ul style="list-style-type: none"> 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. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

2	Lesson 8 – Dividing up to a 4- digit number by a 1-digit number (2)	Number – Multiplication and division	<ul style="list-style-type: none"> 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. 		
	Lesson 9 – Division with remainders (1)	Number – Multiplication and division	<ul style="list-style-type: none"> 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. 		
	Lesson 10 – Division with remainders (2)	Number – Multiplication and division	<ul style="list-style-type: none"> 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. 		
3	Unit 8 – Fractions (1)	Lesson 1 – Equivalent fractions	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. 	5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.
		Lesson 2 – Converting improper fractions to mixed numbers	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. 	
		Lesson 3 – Converting mixed numbers to improper fractions	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. 	
	Lesson 4 – Number sequences	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number. 		
	Lesson 5 – Comparing and ordering fractions (1)	Number – Fractions (including	<ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number. 		

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

4			decimals and percentages)		
		Lesson 6 – Comparing and ordering fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. 	
		Lesson 7 – Fractions as division (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. 	
		Lesson 8 – Fractions as division (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. 	
	Unit 9 – Fractions (2)	Lesson 1 – Adding and subtracting fractions with the same denominator	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Add and subtract fractions with the same denominator and denominators that are multiples of the same number. 	
		Lesson 2 – Adding and subtracting fractions (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Add and subtract fractions with the same denominator and denominators that are multiples of the same number. 	
		Lesson 3 – Adding and subtracting fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Add and subtract fractions with the same denominator and denominators that are multiples of the same number. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

5	Lesson 4 – Adding fractions (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
	Lesson 5 – Adding fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
	Lesson 6 – Adding fractions (3)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
	Lesson 7 – Subtracting fractions (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
6	Lesson 8 – Subtracting fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
	Lesson 9 – Subtracting fractions (3)	Number – Fractions (including	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

			decimals and percentages)	<ul style="list-style-type: none"> Add and subtract fractions with the same denominator and denominators that are multiples of the same number. 	
	Lesson 10 – Subtracting fractions (4)		Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. 	
7	Unit 10 – Fractions (3)	Lesson 1 – Multiplying fractions (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 	
		Lesson 2 – Multiplying fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 	
		Lesson 3 – Multiplying fractions (3)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 	
		Lesson 4 – Multiplying fractions (4)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 5 – Calculating fractions of amounts	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. 	
8	Unit 11- Decimals and percentages	Lesson 1 – Writing decimals (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places. 	<p>5NPV–1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.</p> <p>5NPV–2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.</p> <p>5F–3 Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions.</p>
		Lesson 2 – Writing decimals (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places. 	
		Lesson 3 – Decimals as fractions (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read and write decimal numbers as fractions. 	
		Lesson 4 – Decimals as fractions (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read and write decimal numbers as fractions. 	
		Lesson 5 – Understanding thousandths	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read and write decimal numbers as fractions. 	
9		Lesson 6 – Writing thousandths as decimals	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read and write decimal numbers as fractions. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

10		Lesson 7 – Ordering and comparing decimals (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places. 	
		Lesson 8 – Ordering and comparing decimals (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places. 	
		Lesson 9 – Rounding decimals	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Round decimals with two decimal places to the nearest whole number and to one decimal place. 	
		Lesson 10 – Understanding percentages	Number – Fractions (including decimals and percentages)	<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. 	
		Lesson 11 – Percentages as fractions and decimals	Number – Fractions (including decimals and percentages)	<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. 	
		Lesson 12 – Equivalent fractions, decimals and percentages	Number – Fractions (including decimals and percentages)	<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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

11	Unit 12 - Decimals	Lesson 1 – Adding and subtracting decimals (1)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
		Lesson 2 – Adding and subtracting decimals (2)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
		Lesson 3 – Adding and subtracting decimals (3)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
		Lesson 4 – Adding and subtracting decimals (4)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
12		Lesson 5 – Adding and subtracting decimals (5)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
		Lesson 6 – Adding and subtracting decimals (6)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
		Lesson 7 – Adding and subtracting decimals (7)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 8 – Adding and subtracting decimals (8)	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. 	
1		Lesson 9 – Decimal sequences	Number – Fractions (including decimals and percentages)	<ul style="list-style-type: none"> Read, write, order and compare numbers with up to three decimal places. 	
		Lesson 12 – Multiplying decimals by 10	Number – Fraction (including decimals and percentages) Number- Multiplication and division	<ul style="list-style-type: none"> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Solve problems involving number up to three decimal places. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
		Lesson 13 – Multiplying decimals by 10, 100 and 1,000	Number – Fraction (including decimals and percentages) Number- Multiplication and division	<ul style="list-style-type: none"> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Solve problems involving number up to three decimal places. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
		Lesson 14 – Dividing decimals by 10	Number – Fraction (including decimals and percentages) Number- Multiplication and division	<ul style="list-style-type: none"> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Solve problems involving number up to three decimal places. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
2		Lesson 15 – Dividing decimals by 10, 100 and 1,000	Number – Fraction (including decimals and percentages)	<ul style="list-style-type: none"> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Solve problems involving number up to three decimal places. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

			Number-Multiplication and division	<ul style="list-style-type: none"> Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. 	
3	Unit 13 – Geometry – properties of shapes (1)	Lesson 1 – Measuring angles in degrees	Geometry	<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 (°). 	5G–1 Compare angles, estimate and measure angles in degrees (°) and draw angles of a given size.
		Lesson 2 – measuring with a protractor (1)	Geometry	<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 (°). 	
		Lesson 3 – Measuring with a protractor (2)	Geometry	<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 - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and 1/2 a turn (total 180°) - other multiples of 90°. 	
		Lesson 4 – Drawing lines and angles accurately	Geometry	<ul style="list-style-type: none"> Draw given angles, and measure them in degrees (°). 	
		Lesson 5 – Calculating angles on a straight line	Geometry	<ul style="list-style-type: none"> Identify - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and 1 2 a turn (total 180°) - other multiples of 90° 	
		Lesson 6 – Calculating angles around a point	Geometry	<ul style="list-style-type: none"> Identify - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and 1 2 a turn (total 180°) - other multiples of 90°. 	
		Lesson 7 – Calculating lengths and angles in shapes	Geometry	<ul style="list-style-type: none"> Use the properties of rectangles to deduce related facts and find missing lengths and angles. 	
4	Unit 14 - Geometry –	Lesson 3 – Reasoning about parallel and	Geometry	<ul style="list-style-type: none"> Draw given angles, and measure them in degrees (°). Identify - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and 1/2 a turn (total 180°) - other multiples of 90°. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

	<i>properties of shapes (2)</i>	perpendicular lines		<ul style="list-style-type: none"> Use the properties of rectangles to deduce related facts and find missing lengths and angles 	
		Lesson 4 – Regular and irregular polygons	Geometry	<ul style="list-style-type: none"> Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 	
		Lesson 5 – Reasoning about 3D shapes	Geometry	<ul style="list-style-type: none"> Identify 3D shapes, including cubes and other cuboids, from 2D representations. 	
5	<i>Unit 15 – Geometry – position and direction</i>	Lesson 1- Reflection	Geometry	<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. 	
		Lesson 2 – Reflection with coordinates	Geometry	<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. 	
		Lesson 3 - Translation	Geometry	<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. 	
		Lesson 4 – Translation with coordinates	Geometry	<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. 	
6	<i>Unit 16 – Measuring – converting units</i>	Lesson 1 – Metric units (1)	Measurement	<ul style="list-style-type: none"> Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). 	5NPV–5 Convert between units of measure, including using common decimals and fractions.
		Lesson 2 – Metric units (2)	Measurement	<ul style="list-style-type: none"> Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). 	
		Lesson 3 – Metric units (3)	Measurement	<ul style="list-style-type: none"> Convert between different units of metric measure (for example, kilometre and metre; centimetre and 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

7	Unit 17- Measure – volume and capacity			<p>metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</p> <ul style="list-style-type: none"> Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling. 	
		Lesson 4 – Metric units (4)	Measurement	<ul style="list-style-type: none"> Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling. 	
		Lesson 5 – Imperial units of length	Measurement	<ul style="list-style-type: none"> Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. 	
		Lesson 6 – Imperial units of mass	Measurement	<ul style="list-style-type: none"> Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. 	
		Lesson 7 – Imperial units of capacity	Measurement	<ul style="list-style-type: none"> Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. 	
		Lesson 8 – Converting units of time	Measurement	<ul style="list-style-type: none"> Solve problems involving converting between units of time. 	
		Lesson 9 – Timetables	Measurement Statistics	<ul style="list-style-type: none"> Solve problems involving converting between units of time. Complete, read and interpret information in tables, including timetables. 	
8	Unit 17- Measure – volume and capacity	Lesson 1 – What is volume?	Measurement	<ul style="list-style-type: none"> Estimate volume (for example, using 1 cm³ blocks to build cuboids (including cubes) and capacity (for example, using water). 	
		Lesson 2 – Comparing volumes	Measurement	<ul style="list-style-type: none"> Estimate volume (for example, using 1 cm³ blocks to build cuboids (including cubes) and capacity (for example, using water). 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 3 – Estimating volume	Measurement	<ul style="list-style-type: none"> Estimate volume (for example, using 1 cm³ blocks to build cuboids (including cubes) and capacity (for example, using water). 	
		Lesson 4 – Estimating capacity	Measurement	<ul style="list-style-type: none"> Estimate volume (for example, using 1 cm³ blocks to build cuboids (including cubes) and capacity (for example, using water). 	
9	RTP	5NPV–1	Number- Place value and number	<ul style="list-style-type: none"> Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. 	
	RTP	5NPV–2	Number- Place value and number	<ul style="list-style-type: none"> Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. 	
	RTP	5NPV–3	Number- Place value and number	<ul style="list-style-type: none"> Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. 	
	RTP	5NPV–4	Number- Place value and number	<ul style="list-style-type: none"> Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts. 	
10	RTP	5NPV–5	Number- Place value and number	<ul style="list-style-type: none"> Convert between units of measure, including using common decimals and fractions. 	
	RTP	5NF–1	Number- Place value and number	<ul style="list-style-type: none"> Secure fluency in multiplication table facts, and corresponding division facts, through continued practice. 	
	RTP	5NF–2	Number- Place value and number	<ul style="list-style-type: none"> Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth). 	
	RTP	5MD–1	Number- Multiplication and division	<ul style="list-style-type: none"> Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. 	
11	RTP	5MD–2	Number- Multiplication and division	<ul style="list-style-type: none"> Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. 	
	RTP	5MD–3	Number- Multiplication and division	<ul style="list-style-type: none"> Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. 	

YEAR FIVE MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

	RTP	5MD-4	Number- Multiplication and division	<ul style="list-style-type: none"> Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.
	RTP	5F-1	Number – Fraction (including decimals and percentages)	<ul style="list-style-type: none"> Find non-unit fractions of quantities.
12	RTP	5F-2	Number – Fraction (including decimals and percentages)	<ul style="list-style-type: none"> Find equivalent fractions and understand that they have the same value and the same position in the linear number system.
	RTP	5F-3	Number – Fraction (including decimals and percentages)	<ul style="list-style-type: none"> Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions.
	RTP	5G-1	Geometry	<ul style="list-style-type: none"> Compare angles, estimate and measure angles in degrees ($^{\circ}$) and draw angles of a given size.
	RTP	5G-2	Geometry	<ul style="list-style-type: none"> Compare areas and calculate the area of rectangles (including squares) using standard units.