SHOBNALL PRIMARY & NURSERY SCHOOL

MATHEMATICS PROGRAMME OF STUDY

YEAR 6 LONG TERM OVERVIEW

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

Week	Unit	Lesson titles	Domain	National Curriculum Pupils should be taught to:
1	***Unit 1- Place value within 10,000,000***	Lesson 1 – Numbers to 1,000,000	Number- Number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 2 – Numbers to 10,000,000	Number- Number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 3 – Partition number to 10,000,000	Number- Number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 4 – Powers of 10	Number- Number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 5 – Number line to 10,000,000	Number- Number and place value	• Read, Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
2		Lesson 6 – Compare and order any number	Number- Number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 7 – Round any number	Number- Number and place value	• . Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
		Lesson 8 – Negative numbers	Number- Number and place value	• Use negative numbers in context, and calculate intervals across zero.
	End of Unit Check			
	Unit 2 – Four operation (1)	Lesson 1 – Add integers	Number – Addition, subtraction, multiplication and division	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3		Lesson 2 – Subtract integers	Number – Addition, subtraction, multiplication and division	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		Lesson 3 – Problem solving -addition and subtraction	Number – Addition, subtraction, multiplication and division	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		Lesson 4 – Common factors	Number – Addition, subtraction,	• Identify common factors, common multiples and prime numbers.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

			multiplication and division	
		Lesson 5 – Common multiples	Number – Addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
		Lesson 6 – Rules of divisibility	Number – Addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
4		Lesson 7 – Primes to 100	Number – Addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
		Lesson 8 – Squares and cubes	Number – Addition, subtraction, multiplication and division	• *Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). (YEAR FIVE)*
	End of Unit Check			
	Unit 3 – Four operations (2)	Lesson 1 – Multiply by a 1-digit number	Number – Addition, subtraction, multiplication and division	• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
		Lesson 2 – Multiply up to a 4 -digit number by a 2-digit number	Number – Addition, subtraction, multiplication and division	• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
5		Lesson 3 – Short division	Number – Addition, subtraction, multiplication and division	• 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.
		Lesson 4 – Division using factors	Number – Addition, subtraction,	• Identify common factors, common multiples and prime numbers.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

			multiplication and division	
		Lesson 5 – Divide a 3-digit number by a 2-dgit number (long division)	Number – Addition, subtraction, multiplication and division	• 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.
		Lesson 6 – Divide a 4-digit number by a 2-dgit number (long division)	Number – Addition, subtraction, multiplication and division	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.
		Lesson 7 – Long division with remainders	Number – Addition, subtraction, multiplication and division	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.
6		Lesson 8 – Order of Operations	Number – Addition, subtraction, multiplication and division	• Use their knowledge of the order of operations to carry out calculations involving the four operations. •
		Lesson 9 – Brackets	Number – Addition, subtraction, multiplication and division	• Use their knowledge of the order of operations to carry out calculations involving the four operations. •
		Lesson 10 – Mental calculations (1)	Number – Addition, subtraction, multiplication and division	• Perform mental calculations, including with mixed operations and large numbers.
		Lesson 11 – Mental calculations (2)	Number – Addition, subtraction, multiplication and division	• Perform mental calculations, including with mixed operations and large numbers.
		Lesson 12 – Reason from known facts	Number – Addition, subtraction, multiplication and division	• Use their knowledge of the order of operations to carry out calculations involving the four operations.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

7	**End of Unit Check**			
	Unit 4 – Fractions (1)	Lesson 1 – Equivalent fractions and simplifying fractions	Number – Fractions (including decimals and percentages)	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
		Lesson 2 – Equivalent fractions on a number line	Number – Fractions (including decimals and percentages)	• Compare and order fractions, including fractions > 1.
		Lesson 3 – Compare and order fractions	Number – Fractions (including decimals and percentages)	• Compare and order fractions, including fractions > 1. •
		Lesson 4 – Add and subtract simple fractions	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
8		Lesson 5 – Add and subtract any two fractions	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		Lesson 6 – Add mixed numbers	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		Lesson 7 – Subtract mixed numbers	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		Lesson 8 – Multi-step problems	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		Lesson 9 – Problem solving – add and subtract fractions	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
	End of Unit Check			

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

9	***Unit 5 – Fractions (2)***	Lesson 1 – Multiply fractions by integers	Number – Fractions (including decimals and percentages)	• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		Lesson 2 – Multiplying a fraction by a fraction (1)	Number – Fractions (including decimals and percentages)	• Multiply simple pairs of proper fractions, writing the answer in its simplest form.
		Lesson 3 – Multiplying a fraction by a fraction (2)	Number – Fractions (including decimals and percentages)	• Multiply simple pairs of proper fractions, writing the answer in its simplest form.
		Lesson 4 – Dividing a fraction by an integer (1)	Number – Fractions (including decimals and percentages)	• Divide proper fractions by whole numbers.
10		Lesson 5 – Dividing a fraction by an integer (2)	Number – Fractions (including decimals and percentages)	• Divide proper fractions by whole numbers.
		Lesson 6 – Dividing a fraction by an integer (3)	Number – Fractions (including decimals and percentages)	• Divide proper fractions by whole numbers.
		Lesson 7 – Mixed questions with fractions	Number – Fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		Lesson 8 – Fraction of amount	Number – Fractions (including decimals and percentages)	• Use written division methods in cases where the answer has up to two decimal places.
		Lesson 9 – Fraction of an amount – find the whole	Number – Fractions (including decimals and percentages)	• Use written division methods in cases where the answer has up to two decimal places.
	End of Unit Check			

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

11	***Unit 6 – Measure – imperial and metric measures***	Lesson 1 – Metric measures	Measurement	• 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.
		Lesson 2 – Convert metric measures	*Measurement*	• 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.
		Lesson 3 – Calculate with metric measures	Measurement	• Solve problems involving calculations and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		Lesson 4 – Miles and km	*Measurement*	• Convert between miles and kilometres.
12		Lesson 5 – Imperial measures	Measurement	• 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.
	End of Unit Check			
	Unit 7 – Ratio and proportion	Lesson 1 - Use ratio language	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		Lesson 2 – Introduce ratio symbol	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		Lesson 3 – Ratio and fractions	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
1		Lesson 4 – Scale drawing	Ratio and proportion	• Solve problems involving similar shapes where the scale factor is known can be found.
		Lesson 5 – Scale factors	Ratio and proportion	• Solve problems involving similar shapes where the scale factor is known can be found.
		Lesson 6 – Similar shapes	Ratio and proportion	• Solve problems involving similar shapes where the scale factor is known can be found.
		Lesson 7 – Ratio problems	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		Lesson 8 – Problem solving – ration and proportion (1)	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

2		Lesson 9 – Problem solving – ration and proportion (2)	Ratio and proportion	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
	End of Unit Check			
	Unit 8 – Algebra	Lesson 1 - Find a rule – one step	Algebra	• Generate and describe linear number sequences.
		Lesson 2 – Find a rule – two steps	Algebra	• Generate and describe linear number sequences.
		Lesson 3 – form expressions	Algebra	• Generate and describe linear number sequences.
3		Lesson 4 – Substitution (1)	Algebra	• Express missing number problems algebraically.
		Lesson 5 – Substitution (2)	Algebra	• Express missing number problems algebraically.
		Lesson 6 - Formulae	Algebra	• Use simple formulae.
		Lesson 7 - Form and solve equations	Algebra	• Express missing number problems algebraically.
		Lesson 8 – Solve one-step equations	Algebra	• Express missing number problems algebraically.
4		Lesson 9 – Solve two - step equations	Algebra	• Express missing number problems algebraically.
		Lesson 10 – Find pairs of values	Algebra	• Find pairs of numbers that satisfy an equation with two unknowns.
		Lesson 11 – Solve problems with two unknowns	Algebra	Enumerate possibilities of combinations of two variables
	End of Unit Check			
	Unit 9 – Decimals	Lesson 1 – Place value to 3 decimal places	Number – Fractions (including decimals and percentages)	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

5		Lesson 2 – Round decimals	Number – Fractions (including decimals and percentages)	Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		Lesson 3 – Add and Subtract decimals	Number – Fractions (including decimals and percentages)	Solve problems which require answers to be rounded to specified degrees of accuracy.
		Lesson 4 – Multiply by 10, 100 and 1,000	Number – Fractions (including decimals and percentages)	Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		Lesson 5 – Divide by 10, 100 and 1,000	Number – Fractions (including decimals and percentages)	Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		Lesson 6 – Multiply decimals by integers	Number – Fractions (including decimals and percentages)	• Multiply one-digit numbers with up to two decimal places by whole numbers.
6		Lesson 7 – Divide decimals by integers	Number – Fractions (including decimals and percentages)	• Use written division methods in cases where the answer has up to two decimal places. •
		Lesson 8 – Fractions to decimals	Number – Fractions (including decimals and percentages)	• Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.
		Lesson 9 – Fractions as divisions	Number – Fractions (including decimals and percentages)	• Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.
	End of Unit Check			
	Unit 10 – Percentages	Lesson 1 – Understand percentages	Number – Fractions (including decimals and percentages)	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. •

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

7		Lesson 2 – Fractions to percentages	Number – Fractions (including decimals and percentages)	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. •
		Lesson 3 – Equivalent fractions, decimals and percentages	Number – Fractions (including decimals and percentages)	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. •
		Lesson 4 – Order fractions, decimals and percentages	Number – Fractions (including decimals and percentages)	• Compare and order fractions, including fractions > 1. •
		Lesson 5 – Simple percentage of an amount	Number – Fractions (including decimals and percentages)	• Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		Lesson 6 – Percentage of an amount – 1%	Number – Fractions (including decimals and percentages)	• Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
8		Lesson 7 – Percentages of an amount	Number – Fractions (including decimals and percentages)	• Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		Lesson 8 – Percentages (missing values)	Number – Fractions (including decimals and percentages)	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. •
	End of Unit Check			
	Unit 11 – Measure – perimeter, area and volume	Lesson 1 – Shapes – same area	Measurement	• Recognise that shapes with the same areas can have different perimeters and vice versa.
		Lesson 2 – Area and perimeter	Measurement	• Recognise that shapes with the same areas can have different perimeters and vice versa.
9		Lesson 3 – Area and perimeter – missing length	Measurement	• Recognise that shapes with the same areas can have different perimeters and vice versa.
		Lesson 4 – Area of a triangle	Measurement	• Calculate the area of parallelograms and triangles.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 5 – Area of a right-angled triangle	Measurement	• Calculate the area of parallelograms and triangles.
		Lesson 6 – Area of any triangle	Measurement	• Calculate the area of parallelograms and triangles.
		Lesson 7 – Area of a parallelogram	Measurement	• Recognise when it is possible to use formulae for area and volume of shapes. •
10		Lesson 8 – Problem solving - area	Measurement	• Calculate the area of parallelograms and triangles.
		Lesson 9 – Problem solving - perimeter	Measurement	• Recognise that shapes with the same areas can have different perimeters and vice versa.
		Lesson 10 – Volume - count cubes	Measurement	• Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (for example, mm^3 and km^3).
		Lesson 11 -Volume of a cuboid	Measurement	• Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (for example, mm^3 and km^3).
	End of Unit Check			
11	***Unit 12 – Statistics***	Lesson 1 – Interpret line graphs	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 2 – Draw line graphs	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 3 – Advanced bar charts	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 4 – Understand and complete pie charts	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 5 – Read and interpret pie charts	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
12		Lesson 6 – Pie charts and fractions (1)	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 7 – Pie charts and fractions (2)	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.
		Lesson 8 – Pie charts and percentages	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 9 – Introduction to the mean	Statistics	• Calculate and interpret the mean as an average.
		Lesson 10 – Calculate the mean	Statistics	• Calculate and interpret the mean as an average.
1		Lesson 11 – Problem solving - mean	Statistics	• Calculate and interpret the mean as an average.
	End of Unit Check			
	Unit 13 – Geometry – properties of shape	Lesson 1 – Measure and classify angles	Geometry	• Draw 2D shapes using given dimensions and angles.
		Lesson 2 – Vertically opposite angles	Geometry	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
		Lesson 3 – Angles in a triangle	Geometry	• Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
2		Lesson 4 – Angles in a triangle – special cases	Geometry	• Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		Lesson 5 – Angles in a triangle – special cases	Geometry	• Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		Lesson 6 – Angles in quadrilaterals	Geometry	• Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		Lesson 7 – Angles in polygons	Geometry	• Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		Lesson 8 - Circles	Geometry	• Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius.
3		Lesson 9 – Parts of a circle	Geometry	• Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius.
		Lesson 10 – Draw shapes accurately	Geometry	• Draw 2D shapes using given dimensions and angles.
		Lesson 11 – Nets of a 3D shapes (1)	Geometry	• Recognise, describe and build simple 3D shapes, including making nets.
		Lesson 12 – Nets of a 3D shapes (2)	Geometry	• Recognise, describe and build simple 3D shapes, including making nets.
	End of Unit Check			

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

4	***Unit 14 – Geometry – position and direction***	Lesson 1 – The first quadrant	Geometry	• Describe positions on the full coordinate grid (all four quadrants).
		Lesson 2 – Read and plot points in four quadrants	Geometry	• Describe positions on the full coordinate grid (all four quadrants).
		Lesson 3 – Solve problems with coordinates	Geometry	• Describe positions on the full coordinate grid (all four quadrants).
		Lesson 4 - Translations	Geometry	• Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
		Lesson 5 - Reflections	Geometry	• Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
5	**End of Unit Check**			
	Unit 15 – Problem solving	Lesson 1 – Problem solving – place value	Number – Addition, subtraction, multiplication and division	• Solve number and practical problems that involve all of the above.
		Lesson 2 – Problem solving – negative numbers	Number – Addition, subtraction, multiplication and division	• Solve number and practical problems that involve all of the above.
		Lesson 3 - Problem solving – addition and subtraction	Number – Addition, subtraction, multiplication and division	• Use estimation to check answer to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
		Lesson 4 – Problem solving – four operations (1)	Number – Addition, subtraction, multiplication and division	• Solve problems involving addition, subtraction, multiplication and division.
6		Lesson 5 – Problem solving – four operations (2)	Number – Addition, subtraction, multiplication and division	• Solve problems involving addition, subtraction, multiplication and division.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 6 – Problem solving - fractions	Number – Addition, subtraction, multiplication and division	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		Lesson 7- Problem solving - decimals	Number – Addition, subtraction, multiplication and division	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		Lesson 8 – Problem solving - percentages	Number – Addition, subtraction, multiplication and division	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		Lesson 9 – Problem solving – ratio and proportion	Number – Addition, subtraction, multiplication and division	• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
7		Lesson 10 – Problem solving - time (1)	Number – Addition, subtraction, multiplication and division	• 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.
		Lesson 11 – Problem solving - time (2)	Number – Addition, subtraction, multiplication and division	• 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.
		Lesson 12 – Problem solving – position and direction	Number – Addition, subtraction, multiplication and division	• Describe positions on the full coordinate grid (all four quadrants)
		Lesson 13 – Problem solving – properties of shapes (1)	Number – Addition, subtraction, multiplication and division	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

		Lesson 14 – Problem solving – properties of shapes (2)	Number – Addition, subtraction, multiplication and division	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
8				
	RTP	**6NPV–1**	Number- Place value and number	• Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).
	RTP	**6NPV–2**	Number- Place value and number	• Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.
	RTP	**6NPV–3**	Number- Place value and number	• Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.
	RTP	**6NPV–4**	Number- Place value and number	• Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.
9	**RTP**	**6AS/MD–1**	Number- Addition, subtraction, multiplication and division	• Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).
	RTP	**6AS/MD–2**	Number- Addition, subtraction, multiplication and division	• Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.
	RTP	**6AS/MD–3**	Number- Addition, subtraction, multiplication and division	• Solve problems involving ratio relationships.
	RTP	**6AS/MD–4**	Number- Addition, subtraction,	• Solve problems with 2 unknowns.

YEAR SIX MATHEMATICS LONG TERM OVERVIEW

KEY: NUMBER, GEOMETRY, STATISTICS, RATIO AND PROPORTION, ALGEBRA and MEASUREMENT

AUTUMN TERM, SPRING TERM and SUMMER TERM

			multiplication and division	
	RTP	**6F–1**	Number – Fraction (including decimals and percentages)	• Recognise when fractions can be simplified, and use common factors to simplify fractions.
10	**RTP**	**6F–2**	Number – Fraction (including decimals and percentages)	• Express fractions in a common denomination and use this to compare fractions that are similar in value.
	RTP	**6F–3**	Number – Fraction (including decimals and percentages)	• Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.
	RTP	**6G–1**	Geometry	• Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.
	Consolidation			
	Consolidation			
11	**Consolidation**			
	Consolidation			
	Consolidation			
	Consolidation			
	Consolidation			
12	**Consolidation**			
	Consolidation			
	Consolidation			
	Consolidation			
	Consolidation			