Year 1 and 2 - Fluency, Reasoning & Problem Solving

	Year 1			Year 2		
	Autumn	**Spring**	**Summer**	**Autumn**	**Spring**	**Summer**
Number	Count forwards and backwards Count in tens from zero Compare and order Read and write numerals More and less than a given number Count objects reliably	Count forwards and backwards Count in twos, fives and tens from zero Place value Compare and order More or less than a given number Sequences	Count forwards and backwards Count in twos, fives and tens from zero Place Value Read, write, represent numbers Properties of number	Count forwards and backwards Read and write numbers in numerals and words Compare and order, < and > signs Place value and partitioning of two-digit numbers	Count forwards and backwards Place value and partition in different ways Recognising and positioning multiples of 10 Estimating	Count forwards and backwards Compare and order, < and > signs Sequences Properties of number Half-way between
Addition and Subtraction	Understand addition and subtraction Vocabulary Count on or back to calculate Number facts	Add by counting on Subtract by counting back Find the difference Number facts	Add and subtract involving teens Find the difference Number facts Add and subtract 10 Pattern within calculation	Understand addition and subtraction Count on or back to calculate Add and subtract multiples of 10 add and subtract single digits	How many to the next ten Calculate using known facts and place value Finding a difference Add three one digit numbers	Known facts to 20 Rounding and adjusting Using inverse Add and subtract using a range of strategies
Multiplication and division	Count in twos and tens from zero Doubles	Count repeated groups Sharing	Repeated addition, arrays Grouping Doubles facts	Understanding multiplication Times tables Division as grouping	Times tables Inverse relationships Division as sharing	Times tables and related facts Doubles and halves Understanding remainders
Fractions	Halves	Halving quantities Doubling and halving	Halves and quarters Doubling and halving	Count in halves Understand fraction notation Equal parts Halves, quarters and thirds	Count in quarters Fractions of amounts	Count in thirds Equivalence and fraction families Fractions of amounts
Measures	Compare and order objects Measure and use non-standard units Record measures taken	Compare and order Measure and use non-standard units Measure and compare using standard units - Length	Measure and compare using standard units - Capacity / volume Measure and compare using standard units - Mass / weight	Compare and order Standard units Reading scales Recording measurements	Compare and order Standard units Reading scales Measure and estimate to the nearest cm and m	Compare and order temperatures Reading scales Measure and estimate – mass and capacity Simple scaling problems
Measures – Time	Vocabulary Days of the week	o ’clock months of the year	o ’clock and half-past	Quarter to / past Minutes in an hour	Read to the nearest five minutes Hours in a day	Read to the nearest 5 minutes Compare and sequence intervals of time
Measures – money	Recognising coins Counting, addition and subtraction	Exchanging coins Addition and subtraction	Value of coins and notes Calculating with money	Value of coins Making amounts Equivalence	Total set of mixed coins Making amounts	Making amounts Giving change
Geometry: properties of shapes	Recognise and name 2-D and 3-D shapes	2-D shapes	3-D shapes	2-D shape	3-D shape	Symmetry in 2-D shapes
direction & movement	Using everyday language	Whole and half turns	Quarter and three-quarter turns	Rotation as a turn	Position Movement in a straight line	Repeating patterns Sequences
Statistics				Block diagrams Venn diagrams	Tally charts Block diagrams Carroll diagrams	Pictograms

Year 3 and 4 - Fluency, Reasoning & Problem Solving

	Year 3			Year 4		
	Autumn	**Spring**	**Summer**	**Autumn**	**Spring**	**Summer**
Number	• Count forwards and backwards • Place value and partitioning of three-digit numbers • Compare and order numbers up to 1000 • Round to nearest 10	• Count forwards and backwards • Place value and partitioning in different ways • Read and write numbers in numerals and words • Sequences • Estimation	• Count in steps of 3, 4, 8, 50 and 100 • Compare and order numbers up to 1000 and use the < > signs • Estimate points on a number line • Half-way between • Round to nearest 10 or 100	• Count forwards and backwards • Place value and partitioning in different ways • Compare and order • Round to nearest 10, 100, 1000	• Negative numbers in context • Compare and order negative numbers • Count in steps of 6, 7, 9, 25 and 1000 • Roman numerals	• Place value and partitioning • Compare and order • Half-way between • Sequences to involving negative numbers or decimals
Addition and Subtraction	• Number pairs • Mental addition and subtraction of two digit numbers • Finding a small difference	• Number pairs to 100 • Expanded a\addition and subtraction • Formal columnar addition and subtraction	• Mental addition and subtraction of multiples of 10 and 100 • Formal columnar addition and subtraction of three digit numbers • Estimate and use inverse • Finding the difference	• Mental addition and subtraction • Formal columnar addition and subtraction • Using inverse to check • Number facts to 100	• Mental addition and subtraction • Formal columnar addition and subtraction • Estimate and use inverse to check • Number facts • Find the difference	• Mental addition and subtraction • Formal columnar addition and subtraction • Estimate and use inverse to check • Round and adjust to calculate
Multiplication and division	• Times table facts • Multiply a teens by a single digit • Scaling problems	• Times table facts • Multiply a two digit by single digit • Divide using known facts	• Times table facts • Divide and multiply a two digit by one digit number	• Times tables facts • Multiply and divide by 10, 100 • Informal methods • Factor pairs • Formal method of multiplication • Informal method of division	• Times tables facts • Vocabulary – multiple, factor, product • Formal method of multiplication • Informal method of division	• Multiply three single digits • Formal method of multiplication • Mental division • Know all facts to 12 x 12 • Formal method of short division • Estimate answers by rounding
Fractions (including decimals)	• Compare / order unit fractions • Fraction equivalence • Unit fraction of amounts	• Proper fractions • Equivalence • Fraction pairs – total one whole	• Understand factions as numbers • Understand fractions as division • Add and subtract fractions	• Recognise and represent equivalences • Tenths and hundredths • Add and subtract fractions beyond one whole	• Fraction families • Equivalence using factors and multiples • Decimal equivalence $^1/_{10}$, $^1/_{100}$ • Place value to 2 decimal places • Compare and order	• Recognise equivalence between fractions and decimals • Explore equivalence • Decimal bonds to 1 • Round to whole
Measures	• Standard units - mass • Sensible estimates • Reading scales-marked divisions	• Standard units - length • Estimate and measure • Perimeter	• Standard units – volume • Sensible estimates • Reading scales-marked divisions	• Know, use and convert standard measures • Measure and compare volume • Reading scales	• Use standard units – length • Estimate, measure and compare • Perimeter of rectilinear shapes	• Area of rectilinear shapes • Measure and compare lengths – decimal notation
Measures – Time	• Time conventions • Read the time to five minutes • Analogue , digital, Roman	• Read the time to one minute • Analogue and digital • A.M. and P.M. times	• Read the time fluently – using analogue and digital clocks • 24 hour clock	• Read and write to the nearest minute • Time durations	• Read and write 24 hour clock • Convert between 12 and 24 hour	• Use timetables • Convert between units of time
Measures – money	• Equivalence and making amounts	• Giving change • Money notation (decimals)	• Rounding to estimate • Equivalence between coins		• Money in context	• Find totals with money – mental and written methods
Geometry: properties of shapes	• Right angles • Ordering and comparing angles	• Horizontal, vertical, parallel and perpendicular lines • Describe & construct 3-D shapes	• Symmetry • Describe and construct 2-D shapes	• Regular and irregular polygons • Properties of triangles	• Symmetry in polygons • Acute and obtuse angles • Compare and order angles	• Symmetry - lines of orientation • Symmetric patterns
direction & movement					• Read and plot co-ordinates in the first quadrant	• Understand and describe translations
Statistics	• Bar charts – scales axis • Venn and Carroll diagrams	• Pictograms • Sort sets of mixed data	• Interpret and present data in meaningful ways	• Represent and interpret discrete data	• Compare and interpret data presented in different ways	• Interpret and present continuous data

Year 5 and 6 - Fluency, Reasoning & Problem Solving

	Year 5			Year 6		
	Autumn	**Spring**	**Summer**	**Autumn**	**Spring**	**Summer**
Number	• Place value and partitioning in different ways • Compare and order • Round to the nearest 10, 100, 1 000, 10 000 and 100 000	• Negative numbers • Order and compare positive and negative numbers • Read Roman numerals to 1000	• Linear sequences • Half-way between • Estimation	• Read, write, compare and order numbers to 10 million • Place value and partitioning • Rounding • Estimating	• Compare and order positive and negative numbers • Calculate intervals between positive and negative numbers	
Addition and Subtraction	• Decimal number facts • Mental calculation involving large numbers and decimals • Formal written methods	• Decimals number facts • Mental calculation involving large numbers and decimals • Formal written methods	• Finding the difference • Rounding to check • Mental calculation involving large numbers and decimals • Formal written methods	• Factors and primes • Mental and written calculation • Formal written methods of long multiplication and division	• Using brackets and order of operations • Formal written methods of multiplication and division	• Secure calculation methods • Solving problems using all four operations
Multiplication and division	• Factor pairs • Square numbers • Multiply and divide by 10, 100 and 1000 • Mental calculation • Formal written methods	• Factor pairs • Prime numbers • Mental calculation • Formal written methods of short division • Formal written method of short and long multiplication	• Common factors • Cube numbers • Mental calculation • Formal written methods of short division • Formal written method of short and long multiplication • Scaling problems			
Fractions (including decimals and percentages)	• Finding equivalent fractions • Mixed numbers and improper fractions • Read, write, compare and order decimals • Rounding decimals	• Add and subtract fractions • Find fractions of amounts • Conversion between fractions and decimals • Equivalence between fractions and decimals	• Understanding percentages • Finding simple percentages • Multiply proper fractions and mixed numbers by whole numbers	• Simplify and find equivalence fractions • Compare and order fractions • Add and subtract proper fractions and mixed numbers • Read, write, compare and order decimals • Rounding • Multiply and divide by 10, 100 and 1000 • Equivalence between fractions, decimals and percentages	• Multiply pairs of proper fractions • Divide proper fractions by whole numbers • Decimal place value of decimals up to three decimal places • Multiply one digit decimals with two decimal places by whole numbers • Written short division with answers involving decimals	• Equivalence between fractions, decimals and percentages • Add and subtract mixed numbers • Multiplying and dividing involving decimals
Ratio and Proportion				• Know, use and identify scale factors	• Understanding and calculating with percentages	• Understand and calculate ratio and direct proportion
Algebra				• Representing unknowns • Express ions	• Sequences • n^{th} term	• Expressing an unknown in problems
Measures	• Conversions between metric units • Perimeter of composite shapes	• Conversions between metric and imperial units • Calculate and compare the area of rectangles	• Time conversions • Estimate and compare volume	• Perimeter • Area of triangles and parallelograms	• Estimate, compare and calculate volume • Area of compound shapes	• Imperial and metric conversions • Estimate, compare and calculate volume
Geometry: properties of shapes	• Recognise, measure and name angles • Calculate missing angles	• Diagonal and parallel lines • Properties of rectangles	• 3-D/2-D representations • Regular and irregular shapes • Angles at a point	• Triangles and quadrilaterals • Angles in polygons • Draw 2d shapes with equipment	• Circle properties and construction • Angles on a straight line	• Drawing and constructing nets • Angles in polygons
direction & movement		• Reflection	• Translation	• Plot points in all four quadrants	• Translation and reflection	
Statistics	• Timetables	• Timetables • Tables	• Line graphs • Tables	• Pie charts	• Mean • Pie charts	• Line graphs