

MATHEMATICS SUBJECT UNITS OVERVIEW

	Autumn		Spring		Summer	
	1	2	1	2	1	2
Year 1	<p><u>Number - Place value</u></p> <ul style="list-style-type: none"> Sort objects Count objects Represent objects Count, read and write forwards from any number 0 to 10 Count, read and write backwards from any number 0 to 10 Count one more Count one less One-to-one correspondence to compare groups Compare groups using language such as equal, more/greater, less/fewer Introduce $<$, $>$ and $=$ symbols Compare numbers Order groups of objects Ordinal numbers (1st, 2nd, 3rd ...) The number line 	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> Subtraction – taking away, how many left? Crossing out Subtraction – taking away, how many left? Introducing the subtraction symbol Subtraction – finding a part, breaking apart Fact families – the 8 facts Subtraction – counting back Subtraction – finding the difference Comparing addition and subtraction statements $a+b>c$ Comparing addition and subtraction statements $a+b>c+d$ <p><u>Geometry - Shape</u></p> <ul style="list-style-type: none"> Recognise and name 3-D shapes Sort 3-D shapes Recognise and name 2-D shapes 	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> Add by counting on Find and make number bonds Add by making 10 Subtraction – Not crossing 10 Subtraction – Crossing 10 Compare number sentences <p><u>Number - Place Value (within 50)</u></p> <ul style="list-style-type: none"> Numbers to 50 Tens and ones Represent numbers to 50 One more and one less 	<p><u>Number - Place Value (within 50)</u></p> <ul style="list-style-type: none"> Compare objects within 50 Compare numbers within 50 Count in 2s Count in 5s <p><u>Measurement - Length and Height</u></p> <ul style="list-style-type: none"> Compare lengths and heights Measure length <p><u>Measurement - Weight and Volume</u></p> <ul style="list-style-type: none"> Introduce weight and mass Measure mass Compare mass Introduce capacity and volume Measure capacity Compare capacity 	<p><u>Number - Multiplication and Division</u></p> <ul style="list-style-type: none"> Count in 10s Make equal groups Add equal groups Make arrays Make doubles Make equal groups – grouping Make equal groups - sharing <p><u>Number - Fractions</u></p> <ul style="list-style-type: none"> Find a half Find a quarter <p><u>Geometry - Position and direction</u></p> <ul style="list-style-type: none"> Describe turns Describe position <p><u>Number - Place Value</u></p> <ul style="list-style-type: none"> Counting to 100 Partitioning numbers Comparing numbers Ordering numbers One more, one less 	<p><u>Geometry - Position and direction</u></p> <ul style="list-style-type: none"> Describe turns Describe position <p><u>Number - Place Value</u></p> <ul style="list-style-type: none"> Counting to 100 Partitioning numbers Comparing numbers Ordering numbers One more, one less <p><u>Measurement - Money</u></p> <ul style="list-style-type: none"> Recognising coins Recognising notes Counting in coins <p><u>Measurement - Time</u></p> <ul style="list-style-type: none"> Before and after Dates Time to the hour Time to the half hour Writing time Comparing time

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	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> • Part whole model • Addition symbol • Fact families – addition facts • Systematic methods for number bonds within 10 • Number bonds to 10 • Compare number bonds • Addition – adding together • Addition – adding more • Finding a part 	<ul style="list-style-type: none"> • Sort 2-D shapes • Patterns with 3-D and 2-D shapes <p><u>Number - Place Value (within 20)</u></p> <ul style="list-style-type: none"> • Count forwards and backwards and write numbers to 20 in numerals and words • Numbers from 11 to 20 • Tens and ones • Count one more and once less • Compare groups of objects • Compare numbers • Order groups of objects • Order numbers 				
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Year 2	<p><u>Number - place value</u></p> <ul style="list-style-type: none"> Counting forwards and backwards within 20 Tens and ones within 20 Counting forwards and backwards within 50 Tens and ones within 50 Compare numbers within 50 Counting objects to 100 and read and write numbers in numerals and words Represent numbers to 100 Tens and ones with a part-whole model Tens and ones using addition Using a place value chart Compare objects Compare numbers Order objects and numbers 	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> Add a 2-digit and 1-digit number – crossing 10 Subtraction – crossing 10 Subtract a 1-digit number and from a 2-digit number – crossing tens Add two 2-digit number – not crossing 10 – add ones and add tens Add two 2-digit number – crossing 10 – add ones and add tens Subtract two 2-digit number – not crossing 10 – subtract ones and tens Subtract two 2-digit number – crossing 10 – subtract ones and tens Find and make number bonds Bonds to 100 (tens and ones) Add three 1-digit numbers 	<p><u>Number - Multiplication and Division</u></p> <ul style="list-style-type: none"> Make equal groups – sharing Make equal groups – grouping Divide by 2 Odd and even numbers Divide by 5 Divide by 10 <p><u>Statistics</u></p> <ul style="list-style-type: none"> Make tally charts Draw pictograms (1-1) Interpret pictograms (1-1) Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10) Block diagrams 	<p><u>Geometry - Properties of Shape</u></p> <ul style="list-style-type: none"> Recognise 2-D and 3-D shapes Count sides on 2-D shapes Count vertices on 2-D shapes Draw 2-D shapes Lines of symmetry Sort 2-D shapes Make patterns with 2-D shapes Count faces on 3-D shapes Count edges on 3-D shapes Count vertices on 3-D shapes Sort 3-D shapes Make patterns with 3-D shapes <p><u>Number - Fractions</u></p> <ul style="list-style-type: none"> Make equal parts Recognise a half Find a half Recognise a quarter Find a quarter Recognise a third Find a third Unit fractions Non-unit fractions Equivalence of $\frac{1}{2}$ and $\frac{2}{4}$ Find three quarters Count in fractions 	<p><u>Measurement - Length and Height</u></p> <ul style="list-style-type: none"> Measure length (cm) Measure length (m) Compare lengths Order lengths Four operations with lengths <p><u>Geometry - Position and Direction</u></p> <ul style="list-style-type: none"> Describing movement Describing turns Describing movement and turns Making patterns with shapes 	<p><u>Measurement - Time</u></p> <ul style="list-style-type: none"> O'clock and half past Quarter past and quarter to Telling time to 5 minutes Hours and days Find durations of time Compare durations of time <p><u>Measurement - Mass, Capacity & Temperature</u></p> <ul style="list-style-type: none"> Compare mass Measure mass in grams Measure mass in kilograms Compare volume Millilitres Litres Temperature
	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> Fact families – addition and subtraction bonds to 20 Check calculations Compare number 	<p><u>Measurement - Money</u></p> <ul style="list-style-type: none"> Recognise coins and notes 				

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	<p>sentences</p> <ul style="list-style-type: none"> • Bonds to 100 (tens) • Add and subtract 1s • 10 more and 10 less • Add and subtract 10s • Add by making 10 	<ul style="list-style-type: none"> • Count money – pence • Count money – Pounds (notes and coins) • Select money • Make the same amount • Compare money • Find the total • Find the difference • Find change • Two-step problems <p><u>Number - Multiplication and Division</u></p> <ul style="list-style-type: none"> • Make equal groups • Add equal groups • Make arrays 				
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Year 3	<p><u>Number - Place value</u></p> <ul style="list-style-type: none"> • Represent numbers to 100 • Tens and ones using addition • Hundreds • Representing numbers to 1,000 • 100s, 10s and 1s • Number line to 1,000 • Find 1, 10 and 100 more or less than a given number • Compare objects to 1000 • Compare numbers to 1000 • Order numbers • Count in 50s 	<p><u>Number - Addition and subtraction</u></p> <ul style="list-style-type: none"> • Add two 2-digit numbers – crossing 10 – add ones and tens • Subtract a 2-digit numbers from a 2-digit number – crossing 10 • Add and subtract a 2-digit and 3-digit numbers – not crossing 10 or 100 • Add a 2-digit and 3-digit numbers – crossing 10 or 100 • Subtract a 2-digit and 3-digit numbers – crossing 10 or 100 • Add two 3-digit numbers – not crossing 10 or 100 • Add two 3-digit numbers – crossing 10 or 100 • Subtract a 3-digit number from a 3-digit number – no exchange • Subtract a 3-digit number from a 3-digit number – exchange • Estimate answers to calculations • Check answers 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> • Comparing statements • Related calculations • Multiply 2 digits by 1 digit • Divide 2 digits by 1 digit • Scaling <p><u>Measurement – Money</u></p> <ul style="list-style-type: none"> • Pounds and pence • Converting pounds and pence • Add money • Subtract money • Give change <p><u>Statistics</u></p> <ul style="list-style-type: none"> • Pictograms • Bar charts • Tables 	<p><u>Measurement - Length and perimeter</u></p> <ul style="list-style-type: none"> • Measure length • Equivalent lengths – m and cm • Equivalent lengths – mm and cm • Compare lengths • Add lengths • Subtract lengths • Measure perimeter • Calculate perimeter <p><u>Number - Fractions</u></p> <ul style="list-style-type: none"> • Unit and non-unit fractions • Making the whole • Tenths • Count in tenths • Tenths as decimals • Fractions of a number line • Fractions of a set of objects 	<p><u>Number - Fractions</u></p> <ul style="list-style-type: none"> • Equivalent fractions • Compare fractions • Order fractions • Add fractions • Subtract fractions <p><u>Measurement - Time</u></p> <ul style="list-style-type: none"> • Months and years • Hours in a day • Telling time to the nearest 5 minute • Telling time to the nearest minute • Using a.m. and p.m. • 24-hour clock • Find the duration • Compare the duration • Find start and finish times • Measure time in seconds 	<p><u>Geometry - Properties of shape</u></p> <ul style="list-style-type: none"> • Turns and angles • Right angles in shapes • Compare angles • Draw accurately • Horizontal and vertical • Parallel and perpendicular • Recognise and describe 2-D shapes • Recognise and describe 3-D shapes • Make 3D shapes <p><u>Measurement - Mass and Capacity</u></p> <ul style="list-style-type: none"> • Measure mass • Compare mass • Add and subtract mass • Measure capacity • Compare capacity • Add and subtract capacity
	<p><u>Number - Addition and subtraction</u></p> <ul style="list-style-type: none"> • Add and subtract multiples of 100 • Add and subtract 1s • Add and subtract 3-digit and 1-digit numbers – not crossing 10 • Add a 2-digit number and 1-digit number – crossing 10 • Add 3-digit and 1-digit numbers – crossing 10 • Subtract a 1-digit 					

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	<p>number from 2-digits – crossing 10</p> <ul style="list-style-type: none"> • Subtract 1 1-digit number from a 3-digit number – crossing 10 • Add and subtract 3-digit and 2-digit numbers – not crossing 100 • Add 3-digit and 2-digit numbers – crossing 100 • Subtract a 2-digit number and a 3-digit number – crossing 100 • Add and subtract 100s • Spot the pattern – making it explicit 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> • Multiplication – equal groups • Multiplication using the symbol • Using arrays • 2 times-table • 5 times-table • Making equal groups – sharing • Making equal groups – grouping • Divide by 2 • Divide by 5 • Divide by 10 • Multiply by 3 • Divide by 3 • The 3 times table • Multiply by 4 • Divide by 4 • The 4 times table • Multiply by 8 • Divide by 8 • The 8 times table 				
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Year 4	<p><u>Number – Place value</u></p> <ul style="list-style-type: none"> Represent numbers to 1,000 100s, 10s and 1s Number line to 1,000 Round to the nearest 10 Round to the nearest 100 Count in 1,000s 1,000s, 100s 10s and 1s Partitioning Number line to 10,000 Find 1, 10, 100 and 1,000 more or less 1,000 more or less Compare numbers 	<p><u>Number - Addition and subtraction</u></p> <ul style="list-style-type: none"> Subtract a 3-digit number from a 3-digit number – exchange Subtract two 4-digit numbers with one exchange Subtract two 4-digit numbers with more than one exchange Efficient subtraction Estimate answers Checking strategies <p><u>Measurement - Length and Perimeter</u></p> <ul style="list-style-type: none"> Equivalent lengths – m and cm Equivalent lengths – mm and cm Kilometres Add length Subtract length Measure perimeter Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> 11 and 12 times-table Multiply 3 numbers Factor pairs Efficient multiplication Written methods Multiply 2-digits by 1-digit Multiply 3-digits by 1-digit Divide 2-digits by 1-digit Divide 3-digits by 1-digit Correspondence problems <p><u>Measurement - Area</u></p> <ul style="list-style-type: none"> What is area? Counting squares Making shapes Comparing area 	<p><u>Number - Fractions</u></p> <ul style="list-style-type: none"> Add 2 or more fractions Subtract 2 fractions Subtract from whole amounts Calculate fractions of a quantity Problem solving – calculate quantities <p><u>Number – Decimals</u></p> <ul style="list-style-type: none"> Recognise tenths and hundredths Tenths as a decimals Tenths on a place value grid Tenths on a number line Divide 1 digit by 10 Divide 2-digits by 10 Hundredths Hundredths as decimal Hundredths on a place value grid Divide 1 or 2-digits by 100 	<p><u>Number - Decimals</u></p> <ul style="list-style-type: none"> Make a whole Write decimals Compare decimals Order decimals Round decimals Halves and quarters <p><u>Measurement – Money</u></p> <ul style="list-style-type: none"> Pounds and pence Ordering money Estimating money Four operations <p><u>Measurement – Time</u></p> <ul style="list-style-type: none"> Hours, minutes and seconds Years, months, weeks and days Analogue to digital – 12 hour Analogue to digital – 24 hour 	<p><u>Statistics</u></p> <ul style="list-style-type: none"> Interpret charts Comparison, sum and difference Introducing line graphs Line graphs <p><u>Geometry - Properties of shapes</u></p> <ul style="list-style-type: none"> Identifying angles Compare and order numbers Triangles Quadrilaterals Lines of symmetry Complete a symmetric figure <p><u>Geometry - Position and direction</u></p> <ul style="list-style-type: none"> Describe position Draw on a grid Move on a grid Describe a movement on a grid
	<p><u>Number - Addition and subtraction</u></p> <ul style="list-style-type: none"> Add and subtracts 1s, 10s, 100s and 1000s Add two 3-digit numbers – not crossing 10 or 100 Add two 4-digit numbers – no exchange Add 3-digit numbers – crossing 10 or 100 Add two 4-digit numbers – one exchange Add two 4-digit 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> Multiply by 10 Multiply by 100 	<p><u>Number – Fractions</u></p> <ul style="list-style-type: none"> What is a fraction? Equivalent fractions Fractions greater than 1 Count in fractions 			

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	<ul style="list-style-type: none"> numbers with more than 1 exchange Subtract a 3-digit number from a 3-digit number – no exchange Subtract two 4-digit numbers – no exchange 	<ul style="list-style-type: none"> Divide by 10 Divide by 100 Multiply by 1 and 0 Divide by 1 and itself Multiply and divide by 3 The 3 times-table Multiply and divide by 6 The 6 times-table Multiply and divide by 9 The 9 times-table Multiply and divide by 7 The 7 times-table 				
Year 5	<p><u>Number - Place Value</u></p> <ul style="list-style-type: none"> Numbers to 10,000 Rounding to nearest 1000, 100, 10 & 1 Rounding numbers within 100,000 Numbers to a million Counting in 10s, 100s, 1000s, 10,000s and 100,000s Compare and order numbers to one million Negative Numbers Roman Numerals to 1,000 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> Multiples Factors Common Factors Prime Numbers Square numbers Cube Numbers Multiply by 10 Multiply by 100 Multiply by 10, 100 and 1000 Divide by 10 Divide by 100 Divide by 10, 100 and 1000 Multiples of 10, 100 and 1000 	<p><u>Number - Multiplication and division</u></p> <ul style="list-style-type: none"> Multiply 4-digits by 1 digit Multiply 2-digits (area model) Multiply 2-digits by 2-digits Multiply 3-digits by 2-digits Multiply 4-digits by 2-digits Divide 4-digits by 1-digit <p><u>Number- Fractions</u></p> <ul style="list-style-type: none"> Equivalent fractions Improper fractions to mixed numbers Mixed numbers to 	<p><u>Number- Fractions</u></p> <ul style="list-style-type: none"> Subtract – breaking whole Subtract 2 mixed numbers Multiply unit fractions by an integer Multiply mixed numbers by integers Fractions of an amount Using fractions as operators <p><u>Number - Decimals and Percentages</u></p> <ul style="list-style-type: none"> Decimals up to 2 decimal place Decimals as 	<p><u>Number - Decimals</u></p> <ul style="list-style-type: none"> Adding decimals within 1 Subtracting decimals within 1 Complements to 1 Adding decimals – crossing the whole Adding decimals with the same number of decimal places Subtracting decimals with the same number of decimal places Adding decimals with different number of decimal places Subtracting decimals with different number of 	<p><u>Geometry - Properties of shape</u></p> <ul style="list-style-type: none"> Measuring angles in degrees Measuring with a protractor Drawing lines and angles accurately Calculating angles on a straight line Calculating angles around a point Calculating lengths and angles in shapes Regular and irregular polygons Reasoning about 3D shapes

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	<p><u>Number - Addition and Subtraction</u></p> <ul style="list-style-type: none"> Add two 4 digit numbers – more than one exchange Add whole numbers with more than 4 digits (column method) Subtract two 4 digit numbers – more than one exchange Subtract whole numbers with more than 4 digits (column method) Round to estimate and approximate Inverse operations (addition and subtraction) Multi-Step addition and subtraction problems <p><u>Statistics</u></p> <ul style="list-style-type: none"> Interpret charts Comparison, sum and difference Introduce line graphs Read and interpret line graphs Read and Interpret tables Two-way tables Timetables 	<p><u>Measurement - Perimeter and Area</u></p> <ul style="list-style-type: none"> Measure perimeter Perimeter on a grid Perimeter of rectangles Perimeter of rectilinear shapes Calculate perimeter Counting squares Area of rectangles Area of compound shapes Area of irregular shapes 	<p>improper fractions</p> <ul style="list-style-type: none"> Number sequences Compare and order fractions less/greater than 1 Compare and order fractions greater than 1 Add and subtract fractions Add 3 or more fractions Add fractions Subtract fractions Subtract mixed fractions 	<p>fractions</p> <ul style="list-style-type: none"> Understanding thousands Rounding decimals Order and compare decimals Understanding percentages Percentages as fractions and decimals Equivalent fractions, decimals and percentages 	<p>decimal places</p> <ul style="list-style-type: none"> Adding and subtracting wholes and decimals Decimal sequences Multiplying decimals by 10, 100 and 1000 Divide decimals by 10, 100 and 1000 	<p><u>Geometry - Position and direction</u></p> <ul style="list-style-type: none"> Position in the first quadrant Reflection Reflection with coordinates Translation Translation with coordinates <p><u>Measurement - Converting Units</u></p> <ul style="list-style-type: none"> Kilograms and kilometres Milligrams and millilitres Metric units Imperial units Converting units of time Timetables
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Year 6	<p><u>Number - Place Value</u></p> <ul style="list-style-type: none"> Numbers to 10,000 Numbers to 100,000 Numbers to a million Numbers to ten million Compare and order any number Round numbers to the nearest 10, 100 and 1000 Round any number Negative numbers <p><u>Number - Four Operations</u></p> <ul style="list-style-type: none"> Add whole numbers and with more than 4 digits Subtract whole numbers with more than 4 digits Inverse operations Multiple-step addition and subtraction problems Add and subtract integers Multiply 4-digits by 1-digit 	<p><u>Number – Fractions</u></p> <ul style="list-style-type: none"> Equivalent fractions Simplify fractions Improper fractions to mixed numbers Mixed numbers to improper fractions Fractions on a number line Compare and order (denominator) Compare and order (numerator) Add and subtract fractions Add mixed numbers Add fractions Subtract mixed numbers Subtract fractions Mixed addition and subtraction Multiply fractions by integers Multiply fractions by fractions Divide fractions by integers Four rules with fractions Fraction of an amount 	<p><u>Number - Decimals</u></p> <ul style="list-style-type: none"> Three decimal places Multiply by 10, 100 and 1,000 Divide by 10, 100 and 1,000 Multiply decimals by integers Divide decimals by integers Division to solve problems Decimals as fractions Fractions to decimals <p><u>Number – Percentages</u></p> <ul style="list-style-type: none"> Fractions to percentage Equivalent fractions, decimals and percentages Order fractions, decimals and percentages Percentage of an amount Percentages – missing values <p><u>Number – Algebra</u></p>	<p><u>Number - Decimals</u></p> <ul style="list-style-type: none"> Metric measures Convert metric measures Calculate with metric measures Miles and kilometres Imperial measures <p><u>Measurement - Perimeter, Area and Volume</u></p> <ul style="list-style-type: none"> Shapes – same area Area and perimeter Area of a triangle Area of parallelogram Volume – counting cubes Volume of a cuboid <p><u>Number - Ratio</u></p> <ul style="list-style-type: none"> Using ratio language Ratio and fractions Introducing the ratio symbol Calculating ratio Using scale factors 	<p><u>Geometry - Properties of Shapes</u></p> <ul style="list-style-type: none"> Measure with a protractor Introduce angles Calculate angles Vertically opposite angles Angles in a triangle Angles in a triangle – special cases Angles in a triangle – missing angles Angles in special quadrilaterals Angles in regular polygons Draw shapes accurately Draw nets of 3-D shapes <p><i>Consolidation or SATs preparation</i></p>	<p><i>Consolidations, investigations and preparations for Key Stage 3</i></p>

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	<ul style="list-style-type: none"> • Multiply 2-digits (area model) • Multiply 2-digits by 2-digits • Multiply 3-digits by 2-digits • Multiply up to 4-digit number by 2-digit number • Divide 4 –digits by 1-digit • Divide with remainders • Short division • Division using factors • Long division • Factors • Common factors • Common multiples • Primes to 100 • Squares and cubes • Order of operations • Mental calculations and estimations 	<ul style="list-style-type: none"> • Fraction of an amount – find the whole <p><u>Geometry - Position and Direction</u></p> <ul style="list-style-type: none"> • The first quadrant • Four quadrants • Translations • Reflections 	<ul style="list-style-type: none"> • Find a rule – one and two step • Forming expressions • Substitution • Formulae • Forming equations • Solve simple one-step equations • Solve two-step equations • Find pairs of values • Enumerate possibilities 	<ul style="list-style-type: none"> • Calculating scale factors • Ratio and proportion problems <p><u>Statistics</u></p> <ul style="list-style-type: none"> • Read and interpret line graphs • Draw line graphs • Use line graphs to solve problems • Circles • Read and interpret pie charts • Pie charts with percentages • Draw pie charts • The mean 		
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