MATHS CURRICULUM   Whole School Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Hunting and Hiding**		**Me and my Wonderful World**		**Beside the Sea**	
Strands	Number and place value Addition and subtraction Geometry Statistics Number and place value	Number and place value Addition and subtraction Geometry Measurement Multiplication and division	Number and place value Addition and subtraction Multiplication and division Geometry Statistics Measurement	Number and place value Multiplication and division Fractions Addition and subtraction Measurement	Number and place value Addition and subtraction Measurement Statistics Multiplication and division Fractions	Number and place value Multiplication and division Fractions Measurement Statistics Geometry Addition and subtraction
Overview Summary	Count up to 20 objects (match number to object); estimate and count up to 30 objects; count on and back and order numbers to 10; recognise domino/dice arrays without counting; identify a number 1 more (next number in count) Find pairs that make 5; subitise to 5; find pairs that make 6; subitise to 6; find pairs that make 10; subitise fingers to 10; match pairs to 5, 6 and 10 to number sentences; find missing numbers in number sentences. Double numbers 1 to 5; find 1 and 2 more; count back 1 and begin to find 1 less Recognise, name and describe squares, rectangles, circles and triangles; recognise basic line symmetry; sort 2D shapes according to their properties, using Venn diagrams and Carroll diagrams Read and write numbers and number-names to 20; compare and order numbers to 20; identify 1 more and 1 less; estimate sets of objects, count to check and order sets according to size; understand 0 as the empty set	Understand and then make teen numbers (10 and some 1s); compare and order numbers to 20, then 30; find the number between two numbers with a difference of 2; understand and use ordinal numbers Revise bonds to 5, 6 and 10; find pairs which make 7; use addition facts for 5, 6 and 10 to solve subtractions; use number facts for 5, 6 and 10 to solve word problems Describe position and direction using common words (including half turns); compare lengths and heights; estimate, compare and measure lengths using uniform non-standard and standard units Add 1, 2 and 3 by counting on; subtract 1, 2, 3 or more by counting back; begin to add three small numbers by spotting bonds to 10 or doubles (1-6) Compare and order numbers to 20; recognise coins and know values (up to £2); begin to make amounts in pence; understand teen numbers are 10 and some 1s	Say the number one more or less and two more or less using a number line or a 100 grid; locate 2-digit numbers on a 100 grid and a 1-100 bead string; read, write and say 2-digit numbers and understand them as some tens and some ones Revise pairs to 5, 6, 7, 10 and doubles to double 6; derive subtraction facts; understand a symbol being used for an unknown; use number facts to solve simple addition and subtraction word problems; find pairs of numbers with a total of 8 Add by putting the larger number first and counting on (numbers up to 100), spotting unit patterns; count on from 2-digit numbers; add a 1-digit number to a 2-digit number Name, recognise and know the properties of 3D shapes: cube, cuboid, cone, cylinder and sphere; begin to sort 3D shapes according to properties; order and name the days of the week and months of the year; recognise and name the seasons Count on and back in tens from any number; begin to count in 5s and 2s recognising multiples of 5 end in 5 and 0; children begin to count in 2s; estimate a number of objects within a range and count by grouping into 10s or 5s	Recognise odd and even numbers; count objects in 5s and 10s and begin to say 5 lots and 10 lots; find half, quarter and three quarters of shapes; begin to know that two halves and four quarters are a whole and that two quarters is a half Find and begin to know doubles to double 10; revise pairs to 5, 6, 7, 8, 9 and 10 and derive related subtraction facts; use knowledge of pairs of 10 to make pairs to 20; use number facts to solve word problems Relate units of time weeks, days, hours; divide the days up into parts; read and write times to the hour; begin to have a notion of how long an hour is and how long a minute is; tell the time (o'clock and half past) on analogue and digital clocks; measure using uniform units (cubes and rulers) Add a 1-digit number by counting on from a 2-digit number, not crossing 10s at first, then beginning to cross 10s; subtract a 1-digit number by counting back initially from numbers up to 30 (not crossing 10s) and then generally from a 2-digit number (not crossing 10s) and from multiples of 10 Locate 2-digit numbers on a 100-square; begin to recognise 2-digit numbers as some 10s and 1s; make 2-digit numbers using 10p and smaller coins; find 1 more or 1 less than any number to 100; find 10 more than any number to 90; find 10 less than any number to 100	Find 1 more, 1 less, 10 more, 10 less than any 2-digit number; explore patterns on the 100-square; understand place value in 2-digit numbers and identify 10s and 1s Use number facts to add and subtract 1-digit numbers to/from 2-digit numbers; add pairs of 1-digit numbers with totals above 10; sort out additions into those you 'just know' and those you need to work out Add three small numbers, spotting pairs to 10 and doubles; add and subtract 10 to and from 2-digit numbers Compare weights and capacities using direct comparison; measure weight and capacity using uniform non-standard units; complete tables and block graphs, recording results and information; make and use a measuring vessel for capacity Find half of all numbers to 10 and then to 20; identify even numbers and begin to learn halves; recognise halves and quarters of shapes and begin to know 2/2=1, 4/4=1 and 2/4=1/2; recognise, name and know value of coins 1p–£2 and £5 and £10 notes; solve repeated addition problems using coins; make equivalent amounts using coins	Locate 2-digit numbers on a beaded line and 100-square; compare and order 2-digit numbers up to 100 and say a number between two numbers; identify 10s and 1s in 2-digit numbers and solve place-value additions Recognise odd and even numbers; count in 2s, 5s and 10s, look for patterns; multiply by 2, 5, 10 by counting in groups/sets; find doubles to double 10 and related halves; halve odd numbers up to 10 Tell the time to the half hour and quarter hour on analogue clocks and begin to read these times on digital clocks; revise months of the year; read, interpret and create a pictogram; begin to recognise and read block graphs; measure lengths using non-standard, uniform units; recognise and name simple 2D shapes and continue repeating patterns Use number facts to add and subtract 1-digit numbers to and from 2-digit numbers; find change from 10p and from 20p Locate 2-digit numbers on a bead string and a 1-100 square; order numbers to 100; identify 10s and 1s in 2-digit numbers; say or write 1 more and 1 less and 10 more and 10 less than any number to 100; explore patterns in 10s, 5s and 2s on a 9×9 grid; count in tens from any given number

Year 2	Knights, Castles and Dragons		Ice and Fire		Wild and Wonderful	
Strands	**Number and place value Addition and subtraction Multiplication and division Geometry Statistics**	**Number and place value Measurement Addition and subtraction Number and place value Geometry Multiplication and division**	**Number and place value Addition and subtraction Measurement Geometry**	**Multiplication and division Measurement Statistics Number and place value Addition and subtraction**	**Number and place value Addition and subtraction Measurement Statistics Multiplication and division Fractions**	**Addition and subtraction Number and place value Measurement Multiplication and division**
Overview Summary	Estimate and count a number of objects up to 100; locate numbers on 0−100 beaded lines and 1−100 squares; compare pairs of numbers and find a number in between; order three numbers, order 2-digit numbers Revise number bonds to 6, 7, 8, 9 and 10; know number bonds to 10 and begin to learn related subtraction facts; know multiple of 10 number bonds to 100, learn bonds to 20, rehearse number bonds to 10 and 20 using stories Double numbers to double 15, use patterns in number bonds, use number bonds to solve more difficult additions, to subtract and to solve additions bridging 10 Sort 2D shapes according to symmetry properties using Venn diagrams, identify right angles and sort shapes using Venn diagrams, recognise squares, rectangles, circles, triangles, ovals and hexagons and discover which tessellate, sort shapes and objects using a two-way Carroll diagram Begin to mark numbers on a landmarked line, compare and order numbers, using < and > signs, find 1 and 10 more or less using the 100-square, find 10 more and 10 less than any 2-digit number	Know and use ordinal numbers; Understand that 2-digit numbers are made from some 10s and some 1s; Understand place value using 10p and 1p coins; Find 10p more and 10p less; Find 10 more and 10 less Add and subtract 10, 20 and 30 to any 2-digit number; Add and subtract 11, 21, 12 and 22 to any 2-digit number; Solve addition and subtractions by counting on and back in 10s then in 1s Understand and use terms and vocabulary associated with position, direction and movement; Measure lengths using uniform units; Begin to measure in centimetres and metres Add and subtract 2-digit numbers; Add near doubles to double 15; Add several small numbers spotting near doubles or pairs to 10, etc. Count in 2s, 5s and 10s from zero; Count in multiples of 2p, 5p and 10p; Number sequences of 2s, 5s and 10s; Find the totals of coins and ways to make an amount; Use coins to make given amounts of money	Place value and ordering 2-digit numbers; place value additions and subtractions; add and begin to subtract 9, 10 and 11 Revise number bonds to 10; begin to bridge 10; subtract from 10 and 20; use number facts to find the complement to ten; find a difference between two numbers by counting on Rehearse complements to multiples of 10; find differences using a number line; find change from 10p and 20p, and from £10 to £20 by counting up and using bonds to 10 and 20; add two 2-digit numbers by counting on Recognise and identify properties (including faces and vertices) of 3D shapes; sort according to properties including number of faces; name the 2D shapes of faces of 3D shapes; tell the time to the nearest quarter on analogue and digital clocks Order 2-digit numbers and revise the < and > signs; locate 2-digit numbers on a landmarked line and grid; round 2-digit numbers to nearest 10; estimate a quantity <100 within a range	Revise doubles and corresponding halves to 15; find half of odd and even numbers to 30; Revise and recognise 1/2s, 1/4s, 1/3s and 2/3s of shapes; place 1/2s on a number line; count in 1/2s and 1/4s; understand and write mixed numbers Count in 2s, 5s and 10s to solve multiplication problems and find specified multiples; introduce the × sign; record the 2, 5 and 10 times-tables; find multiplications with the same answer; write multiplications to go with arrays, rotate arrays to show they are commutative Tell the time to the nearest quarter of an hour using analogue and digital clocks; understand the relationship between seconds, minutes and hours and use a tally chart; interpret and complete a pictogram or block graph where one block or symbol represents one or two things Revise 2, 5 and 10 times-tables; revise arrays and hops on the number line; multiply by 2, 3, 4, 5 and 10; arrange objects into arrays and write the corresponding multiplications; make links between grouping and multiplication to begin to show division; write divisions as multiplications with holes in and use the ÷ sign Recognise all coins, know their value, and use them to make amounts; recognise £5, £10, £20 notes; make amounts using coins and £10 note; write amounts using £.p notation; order coins 1p – £2 and notes £5 – £20; add several coins writing totals in £.p notation (no zeros in 10p place); add two amounts of pence, using counting on in 10s and 1s; add two amounts of money, beginning to cross into £s	Locate, order and compare 2-digit numbers on 0-100 landmarked lines and on the 1-100 square; use < and > signs; locate numbers on an empty 0-100 line; introduce numbers 101 to 200 and count in 100s to 1000; add 2-digit numbers by counting on in 10s and 1s; subtract 2-digit numbers by counting back in 10s and 1s Use doubles and number bonds to add three 1-digit numbers; use number facts to 10 and 20 in number stories; find complements to multiples of 10; understand subtraction as difference and find this by counting up; find small differences either side of a multiple of 10 Add and subtract 1-digit numbers to and from 2-digit numbers; subtract 2-digit numbers by counting back in tens and ones; add two 2-digit numbers by counting in 10s, then adding 1s; add 2-digit numbers using 10p and 1p coins (partitioning, answers less than 100); add 2-digit numbers using place-value cards (partitioning, answers more than 100) Measure weight using standard or uniform non-standard units; draw a block graph where one square represents two units; weigh items using 100g weights using scales marked in multiples of 1kg or 100g; measure capacity using uniform non-standard units; measure capacity in litres and in multiples of 100ml Double multiples of 10 and 5 (answers less than 100); double 2-digit numbers ending in 1, 2, 3 or 4 (answers less than 100); find a quarter of numbers up to 40 by halving twice; begin to find 3/4 of numbers; find 1/2 1/4 and 1/3 of amounts (sharing); find patterns	Count back in 10s and 1s to solve subtraction (not crossing 10s) and check subtraction using addition, beginning to understand that addition undoes subtraction and vice versa; add three or more small numbers using number facts; record amounts of money using £·p notation including amounts with no 10s or 1s; find more than one way to solve a money problem Count in 3s, recognising numbers in the 3 times-table; write multiplications to go with arrays and use arrays to solve multiplication problems; understand that multiplication is commutative and that division and multiplication are inverse operations; solve divisions as multiplications with a missing number; count in 2s, 3s, 5s and 10s to solve divisions and solve division problems in contexts Measure and estimate lengths in centimetres; tell the time involving multiples of 5 minutes past the hour and 5 minutes to the hour; tell time to 5 minutes; begin to say the time 10 minutes later Partition to add two 2-digit numbers; find the difference between two 2-digit numbers; multiply two numbers using counting in steps of 2, 3, 5 and 10; solve division problems by counting in steps of 2, 3, 5 and 10 Compare two 2-digit numbers and find bonds to 100 using thermometers; revise place value in 2-digit numbers, numbers between 100 and 200, and 3-digit numbers (including zeros in the 10s and 1s places)

Year 3	Rumble in the Jungle		Superheroes		Digging up the Past	
Strands	**Addition and subtraction Multiplication and division Measurement Geometry Number and place value**	**Multiplication and division Fractions Measurement Addition and subtraction Number and place value**	**Number and place value Addition and subtraction Multiplication and division Statistics Fractions Geometry Measurement**	**Number and place value Addition and subtraction Measurement Multiplication and division**	**Addition and subtraction Multiplication and division Fractions Statistics Measurement**	**Addition and subtraction Geometry Measurement Multiplication and division Fractions**
Overview Summary	Use multiple of 5 and 10 bonds to 100 to solve additions and subtractions; add and subtract 1-digit numbers to and from 2-digit numbers

Compare and order 2- and 3- digit numbers; count on and back in 10s and 1s; add and subtract 2-digit numbers

Know multiplication and division facts for the 5, 10, 2, 4 and 3 times-tables; doubling and halving

Know and understand the calendar, including days, weeks, months, years; tell the time to the nearest 5 minutes on analogue and digital clocks; know the properties of 3D shapes

Comparing, ordering and understanding place value of 2- and 3-digit numbers; subtracting from 2- and 3-digit numbers; using prediction to estimate calculations | Doubling and halving numbers up to 100 using partitioning; understanding fractions and fractions of numbers

Use money to add and subtract and record using the correct notation and place value; add and subtract 2-digit numbers using partitioning; add three 2-digit numbers by partitioning and recombining.

Choose an appropriate instrument to measure a length and use a ruler to estimate, measure and draw to the nearest centimetre; know 1 litre = 1000 ml; estimate and measure capacity in millilitres

Place 2- and 3-digit numbers on a number line; round 3-digit numbers to nearest 100; use counting up to do mental subtractions with answers between 10 and 20, 10 and 30, and either side of 100

Revise times-tables learned and derive division facts; perform division with remainders; choose a mental strategy to solve additions and subtractions; solve word problems | Rehearse place value in 3-digit numbers, order them on a number line and find a number in between; compare number sentences; solve additions and subtractions using place value; multiply and divide by 10 (whole number answers); count in steps of 10, 50 and 100.

Add pairs of 2-digit numbers using partitioning (crossing 10s, 100 or both) and then extend to add two 3-digit numbers (not crossing 1000); recognise and sort multiples of 2, 3, 4, 5, and 10; double the 4 times-table to find the 8 times-table; derive division facts for the 8 times-table; multiply and divide by 4 by doubling or halving twice

Identify 1/2s, 1/3s, 1/4,s 1/6s, and 1/8s; realise how many of each make a whole; find equivalent fractions; place fractions on a 0 to 1 line; find fractions of amounts

Recognise right angles and know they are 90°; understand angles are measured in degrees; recognise ° as the symbol for the measurement of degrees; name and list simple properties of 2D shapes; begin to understand and use the term perimeter to mean the length/distance around the edge (border) of a 2D shape; begin to calculate using a ruler; know a right angle is a quarter turn; know 360° is a full turn; begin to understand angles and identify size of angles in relation to 90°

Place 3-digit numbers on empty 100 number lines; begin to place 3-digit numbers on 0-1000 landmarked and empty number lines; round 3-digit numbers to the nearest ten and to the nearest hundred; use counting up as a strategy to perform mental subtraction (Frog); subtract pounds and pence from five pounds; use counting up (Frog) as a strategy to perform mental subtraction of amounts of money; subtract pounds and pence from ten pounds | Understand place-value in 3-digit numbers; separate 3-digit numbers into hundreds, tens, and ones; add two 3-digit numbers using vertical written addition (expanded); add 2- and 3-digit numbers using vertical written addition (expanded)

Add two 2-digit numbers mentally; add 2-digit to 3-digit numbers mentally using place value and rounding; add two 3-digit numbers using expanded written method (answers under 1000); begin to move tens and hundreds moving towards formal written addition; add two 3-digit numbers using expanded column addition; investigate patterns in numbers when adding them; choose to solve addition using a mental method or expanded column addition (written method)

Tell the time to the nearest minute on analogue and digital clocks (minutes past and minutes to); time events in minutes and seconds; find a time after a given interval (not crossing the hour); calculate time intervals; solve word problems involving time

Order 3-digit numbers and find numbers between; solve subtractions of 3-digit - 3-digit numbers using counting up (Frog); use counting up and counting back as strategies to perform mental subtractions; choose to solve a given subtraction by counting up or counting back

Double and halve numbers up to 100 by partitioning; solve word problems involving doubling and halving; multiply numbers between 10 and 25 by 1-digit numbers using the grid method; divide multiples of 10 by 1-digit numbers using known tables facts; see the relation between multiplication and division | Add 3-digit and 1-digit numbers mentally, using number facts; subtract 1-digit numbers from 3-digit numbers mentally using number facts; add and subtract multiples of 10 by counting on and back in 10s and using number facts to cross 100s; compare and order fractions with the same denominator; begin to recognise equivalences of 1/2; add and subtract fractions with the same denominator

Use function machines to multiply by 2, 3, 4, 5 and 8 and understand the inverse; use scaling to multiply heights and weights by 2, 4, 8, 5 and 10; use known facts to multiply multiples of 10 by 2, 3, 4 and 5; multiply numbers between 10 and 30 by 3, 4 and 5 using the grid method; multiply 2-digit numbers by 3, 4, 5 and 8 using the grid method

Divide without remainders, just beyond the 12th multiple; division using chunking, with remainders; use the grid method to multiply 2-digit numbers by 3, 4 ,5 and 8; begin to estimate products

Draw and interpret block graphs and pictograms where one square/symbol represents two units; compare and measure weights in multiples of 100g; know how many grams are in a kilogram; estimate and weigh objects to the nearest 100g; draw and interpret bar charts where one square represents one hundred units

Add 3-digit and 2-digit numbers using mental strategies; add two 3-digit numbers using mental strategies or by using column addition | Use column addition to add three 2-and 3-digit numbers together and four 2- and 3-digit numbers together; subtract 3-digit numbers using counting up; solve word problems choosing an appropriate method

Add 3-digit numbers using column addition; solve problems involving measures; solve subtractions of 3-digit numbers using counting up on a line and work systematically to find possibilities; choose an appropriate strategy to solve addition or subtraction

Identify, name and draw horizontal, vertical, perpendicular, parallel and diagonal lines, angles and symmetry in 2D shapes; measure the perimeter of 2D shapes by counting and measuring with a ruler; tell the time on analogue and digital clocks to the minute, begin to tell the time 5, 10, 20 minutes later, recognise am and pm and 24-hour clock times

Use the grid method to multiply 2-digit numbers by 3, 4, 5, 6 and 8; estimate products; divide using chunking, with and without remainders; decide whether to use multiplication or division to solve word problems; recognise tenths and equivalent fractions; find one-tenth and several tenths of multiples of 10 and begin to find one-tenth of single-digit numbers

Revise column addition for adding three 3-digit numbers; revise mental strategies for addition; subtract 3-digit numbers using written and mental methods; find change using counting up; check subtraction using addition; multiply numbers between 10 and 40 by 1-digit numbers using grid method; solve division problems just beyond the known tables facts |

Year 4	Walk like an Egyptian		Born in the USA	Mighty Mountains and Raging Rivers	Invaders and Settlers	Cool to be Me
Strands	**Addition and subtraction** **Number and place value** **Multiplication and division** **Fractions** **Measurement**	**Multiplication and division** **Fractions** **Number and place value** **Addition and subtraction** **Measurement** **Statistics**	**Number and place value** **Addition and subtraction** **Multiplication and division** **Measurement** **Fractions** **Geometry**	**Fractions** **Number and place value** **Addition and subtraction** **Measurement** **Multiplication and division**	**Number and place value** **Addition and subtraction** **Fractions** **Multiplication and division** **Measurement** **Geometry** **Fractions**	**Addition and subtraction** **Multiplication and division** **Geometry** **Statistics** **Fractions**
Overview Summary	Finding pairs with a total of 100; adding to the next multiple of 100 and subtracting to the previous multiple of 100; subtract by counting up to find a difference; adding several numbers Read, write 4-digit numbers and know what each digit represents; compare 4-digit numbers using < and > and place on a number line; add 2-digit numbers mentally; subtract 2-digit and 3-digit numbers Learn × and ÷ facts for the 6 and 9 times-table and identify patterns; multiply multiples of 10 by single-digit numbers; multiply 2-digit numbers by single-digit numbers (the grid method); find fractions of amounts Tell and write the time to the minute on analogue and digital clocks; calculate time intervals; measure in metres, centimetres and millimetres; convert lengths between units; record using decimal notation Add two 3-digit numbers using column addition; subtract a 3-digit number from a 3-digit number using an expanded column method (decomposing only in one column)	Double 3-digit numbers and halve even 3-digit numbers; revise unit fractions; identify equivalent fractions; reduce a fraction to its simplest form; count in fractions (each fraction in its simplest form) Look at place value in decimals and the relationship between tenths and decimals; add two 4-digit numbers; practise written and mental addition methods; use vertical addition to investigate patterns Convert multiples of 100 g into kilograms; convert multiples of 100 ml into litres; read scales to the nearest 100 ml; estimate capacities; draw bar charts, record and interpret information Round 4-digit numbers to the nearest: 10, 100 and 1000; subtract 3-digit numbers using the expanded written version and the counting up mental strategy and decide which to use Use the grid method to multiply 3-digit by single-digit numbers and introduce the vertical algorithm; begin to estimate products; divide numbers (up to 2 digits) by single-digit numbers with no remainder, then with a remainder	Place 4-digit numbers on landmarked lines; 0–10 000 and 1000–2000; round 4-digit numbers to the nearest 10, 100 and 1000; mentally add and subtract to/from 4-digit and 3-digit numbers using place-value; count on and back in multiples of 10, 100 and 1000; count on in multiples of 25 and 50; add and subtract multiples of 10 and 100 to/from 4-digit numbers Use expanded written subtraction and compact written subtraction to subtract pairs of 3-digit numbers (one 'exchange'); use expanded column subtraction and compact column subtraction to subtract pairs of 3-digit and 2-digit numbers from 3-digit numbers (one 'carry'); learn the 7 times-table and 'tricky' facts; use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers Use mental multiplication and division strategies; find non-unit fractions of 2-digit and 3-digit numbers; find equivalent fractions and use them to simplify fractions (halves, thirds, quarters) Recognise and compare acute, right and obtuse angles; draw lines of a given length; identify perpendicular and parallel lines; recognise and draw line symmetry in shapes; sort 2D shapes according to their properties; draw shapes with given properties; draw the other half of symmetrical shapes Understand how to divide 2-digit and 3-digit numbers by 1-digit numbers using place value and mental strategies; divide numbers by 1-digit numbers to give answers between 10 and 25, with remainders; identify factor pairs and use these to solve multiplications and divisions with larger numbers; use Frog to find complements to multiples of 1000; use Frog to find change from £10, £20 and £50	Recognise, use, compare and order decimal numbers; understand place value in decimal numbers; recognise that decimals are tenths; round decimals numbers to the nearest whole number; divide 2-digit numbers by 10 to get decimal numbers; multiply decimal numbers by 10 to get 2-digit numbers; divide 3-digit multiples of ten by 100 to get decimal numbers; multiply decimal numbers by 100 to get 3-digit multiples of ten; add four digit numbers using written method with answers greater than 10 000 Add amounts of money using written methods and mentally using place value and number facts; choose to add using the appropriate strategy: mental or written; subtract, choosing appropriate mental strategies: counting up or taking away (using counting back, place value or number facts); solve subtractions using a suitable written method (column subtraction) Tell the time on a 24 hour clock, using am and pm correctly; convert pm times to 24 hour clock and vice versa; use 24 hour clock in calculating intervals of time; measure and calculate perimeters of rectilinear shapes where each side is labelled in cm and m; find missing lengths in rectilinear composite shapes; find the perimeters of rectilinear shapes with some lengths not marked; convert from one unit of length to another; solve word problems involving lengths including those involving perimeters Understand place value in 4-digit numbers; partition 4-digit numbers; solve subtraction of 4-digit numbers using column subtraction (decomposition); choose an appropriate method to solve subtractions, either mental or written, and either column or counting up (Frog) Use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; explore patterns; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1-digit numbers to give answers between 10 and 35, without remainders; solve word problems	Read, write and compare 4-digit numbers and place on a line; find 1000 more or less than any given number; read, write and compare 5-digit numbers; recognise what each digit represents in a 5-digit number; read, use and compare negative numbers in the context of temperature Multiply and divide numbers by 10 and 100 including decimals (tenths and hundredths); read and write decimals (to 1 and 2 places), understanding that these represent parts (tenths and hundredths) of numbers; mark 1- and 2- place decimals on a line; count in tenths (0.1s) and hundredths (00.1s); multiply numbers with up to 2 decimal places by 10 and 100, and divide numbers by 10 and 100; say the number one tenth and one hundredth more or less than a given number; round decimal numbers to the nearest whole number Learn 11 and 12× tables; develop and use effective mental multiplication strategies; use a vertical written method to multiply 3-digit numbers by 1-digit numbers; use rounding to estimate answers; use a written method to multiply 3-digit numbers, including amounts of money by 1-digit numbers; multiply 2-digit and 3-digit numbers by 1-digit numbers; understand how division 'undoes' multiplication and vice versa; divide above the tables facts using multiples of 10 Recognise and write Roman numerals to 100; begin to know the history of our number system including 0; calculate area and perimeter of rectilinear shapes using multiplication and addition, or counting; recognise, name and classify 2D shapes identifying regular and irregular polygons; sort 2D shapes according to properties including types of quadrilaterals and triangles; revise 3D shapes, consider 2D-shaped sides on 3D shapes, and sort shapes Understand, read and write 2-place decimals; compare 2-place decimals in the context of lengths; add and subtract 0·1 and 0·01 and say a number one-tenth (0·1) or one-hundredth (0·01) more or less than a given number; revise equivalent fractions; write fractions with different denominators with a total of 1; recognise decimal and fraction equivalents	Add two 2-digit numbers or a 2-digit number to a 3- or 4-digit number mentally; subtract 2-, 3- and 4-digit numbers using counting up; derive factors of 2-digit numbers and use factors and doubling to solve multiplication mentally; solve integer scaling problems using mental strategies and spot a relationship between products; solve correspondence problems, using a systematic approach and calculate using mental multiplication strategies Solve written addition of two 4-digit numbers; add amounts of money (pounds and pence) using column addition; solve 4-digit minus 4-digit and 4-digit minute 3-digit subtractions using written column method (decomposition) and check subtraction with addition; solve word problems choosing an appropriate method Use coordinates to draw polygons; find the coordinates of shapes after translation; draw and interpret bar charts and pictograms; draw line graphs and understand that intermediate points have meaning Use the vertical algorithm (ladder) to multiply 3-digit numbers by 1-digit numbers; find non-unit fraction of amounts, using 'chunking'; add fractions with like denominators, including totals greater than 1; divide by 10 and 100 (to give answers with 1 and 2 decimal places) Multiply 2-digit numbers by 11 and 12; look for patterns and write rules; multiply 2-digit numbers by numbers between 10 and 20 using the grid method; begin to use the grid method to multiply pairs of 2-digit numbers; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1-digit numbers to give answers between 20 and 50, with and without remainders; find non-unit fractions of amounts

Year 5	Astronomical	The Terrible Tudors	The Groovy Greeks		London's Calling	
Strands	**Number and place value** **Addition and subtraction** **Fractions** **Multiplication and division** **Measurement**	**Multiplication and division** **Geometry** **Number and place value** **Fractions** **Addition and subtraction**	**Number and place value** **Fractions** **Addition and subtraction** **Multiplication and division** **Geometry** **Measurement** **Statistics**	**Multiplication and division** **Fractions** **Geometry** **Measurement** **Addition and subtraction**	**Addition and subtraction** **Fractions** **Multiplication and division** **Fractions** **Number and place value** **Geometry**	**Multiplication and division** **Fractions** **Multiplication and division** **Number and place value** **Statistics** **Measurement**
Overview Summary	Read, write, compare and order 5-digit numbers, understanding the place value and using < and >signs; add and subtract multiples of 10, 100 and 1000 to and from 5-digit numbers; use written addition to add two 4-digit numbers; work systematically to spot patterns

Add and subtract 2-digit numbers mentally; choose a strategy for solving mental additions or subtractions; solve word problems

Understand place value in decimal numbers; multiply and divide numbers with up to two decimal places by 10 and 100; multiply and divide by 0 and 100; add and subtract 0·1 and 0·01; multiply and divide by 4 by doubling or halving twice; use mental multiplication strategies to multiply by 20, 25 and 9

Revise converting 12-hour clock times to 24-hour clock times; find a time a given number of minutes or hours and minutes later; calculate time intervals using 24-hour clock format; measure lengths in mm and convert to cm; find perimeters in cm and convert cm to m

Solve subtraction using a written method for 3-digit − 3-digit numbers and for 4-digit numbers; use counting up (Frog) as a strategy to perform mental subtraction; find change from a multiple of ten pounds using counting up | Recognise which numbers are divisible by 2, 3, 4, 5, 6, 9 and 25 and identify multiples; find factors; compare and place fractions on a line; find equivalent fractions and reduce them to their simplest form

Use mental strategies to multiply and divide multiples of 10 and 100; use a written method to multiply 3-digit and 4-digit numbers by 1-digit numbers and estimate answers; divide 3-digit numbers by 1-digit numbers using a written method and express remainders as a fraction

Use a protractor to measure and draw angles in degrees; recognise, use terms and classify angles as obtuse, acute and reflex; recognise that angles on a line total 180° and angles round a point total 360°; identify and name parts of a circle including diameter, radius and circumference; draw circles to a given radius using a pair of compasses; relate angles to turns, and recognise that a 360° angle is a complete turn; use angle facts to solve problems related to turn

Place numbers to 100 000 and decimals up to two places on a line, round numbers to the nearest 10, 100 and 1000 and decimals up to two places to the nearest whole number; compare and order numbers with up to two decimal places; reduce fractions to their simplest form; know and recognise equivalent fractions and decimals to half, tenths and fifths

Revise mental and written addition and subtraction strategies, choose to use a mental strategy or written method to solve addition and subtraction, choose to solve multiplication and division questions including 2- and 3-digit by 1-digit and 2-digit by 2-digit using a mental or a written method, Identify the operation being used on numbers, understand that addition and subtraction are inverse operations multiplication and division, use function machines | Read, write and order numbers with up to 6 digits and understand the place value of each digit; place 6-digit numbers on a number line and find numbers between; solve place-value additions and subtractions with 6-digit numbers; understand place value in decimal numbers as tenths and hundredths; multiply and divide by 10/100/1000 using a place-value grid; understand place value in decimal numbers to 2-decimal places; place decimal numbers on a line; round two-place decimal numbers to nearest tenth and whole number; say the number a tenth or a hundredth more

Rehearse mental addition strategies for decimals and whole numbers; use counting on as a strategy to perform mental addition of 2-place decimals to the next whole number; solve missing number sentences; use mental strategies to solve word problems; use counting up as a strategy to perform written subtraction (Frog)

Use rules of divisibility to find if numbers are divisible by 2, 3, 4, 5, 9 and 10; identity prime numbers; revise finding factors of numbers; find squares and square roots of square numbers; make and test rules; use mental multiplication and division strategies; relate mental division strategies to multiples of ten of the divisor

Know properties of equilateral, isosceles, scalene and right-angled triangles; find that angles in a triangle have a total of 180°; sort triangles according to their properties; use scales to weigh amounts to the nearest half interval; convert from grams to kilograms and vice versa, from millilitres to litres and vice versa, and from metres to kilometres and vice versa; read scales to the nearest half division; understand that we measure distance in kilometres and miles; use ready reckoning to give approximate values of miles in kilometres and vice versa; draw line conversion graphs

Use a written column method to add amounts of money in pounds and pence; add 2-place decimals using written column addition; subtract decimal numbers using counting up (Frog) | Use a written method (grid) to multiply pairs of 2-digit numbers; use short division to divide 3-digit numbers by 1-digit numbers, including those which leave a remainder

Find unit fractions and non-unit fractions of 3-digit numbers; use short multiplication to multiply 3-digit numbers by 1-digit numbers; begin to use short multiplication to multiply 4-digit numbers by 1-digit numbers

Understand what a polygon is; draw polygons using dotted square and isometric paper; revise terms obtuse, acute and reflex angles, perpendicular and parallel sides; recognise quadrilaterals as polygons and identify their properties; classify quadrilaterals; draw regular polygons and explore their properties; revise metric units of weight, capacity and length; understand that we can measure in imperial units and relate these to their instances in daily life

Place mixed numbers on lines; count up in fractions using equivalence; convert improper fractions to mixed numbers and vice versa; write improper fractions as mixed numbers and vice versa; multiply proper fractions by whole numbers

Solve subtraction of 4-digit numbers using written column subtraction (decomposition); add several numbers using written column addition; use column to solve problems | Add mentally 2-place decimal numbers in the context of money using rounding; add several small amounts of money using mental methods; mentally subtract amounts of money including giving change; calculate the difference between two amounts using counting up; solve word problems, including 2-step problems, choosing an appropriate method

Multiply fractions less than 1 by whole numbers, convert improper fractions to whole numbers; use short multiplication to multiply 3-digit and 4-digit numbers by 1-digit numbers; use long multiplication to multiply 2-digit and 3-digit numbers by teens numbers

Read, write and compare decimals to three decimal places, understanding that the third decimal place represents thousandths; multiply and divide numbers by 10, 100 and 1000 using 3-place decimal numbers in the calculations; place 2-place decimals on a number line and round them to the nearest tenth and whole number; read, write, order and compare 3-place decimal numbers; understand and use negative numbers in the context of temperature

Read and mark co-ordinates in the first two quadrants; draw simple polygons using co-ordinates; translate simple polygons by adding to and subtracting from the co-ordinates; reflect simple shapes in the y axis or in a line, noting the effect on the co-ordinates; translate simple shapes and note what happens to the co-ordinates; draw regular and irregular 2D shapes using given dimensions and angles; use the properties of 2D shapes, including rectangles, to derive related facts; identify 3D shapes from 2D representations; create 3D shapes using 2D nets and draw 3D shapes

Add 5-digit numbers using written addition; subtract 5-digit numbers using written method (decomposition); check answers to subtractions using written column addition; solve subtractions of 4- and 5-digit numbers using written column subtraction or number line counting up | Identify factors and multiples, find factor pairs; revise equivalent fractions; compare and order fractions with related denominators; add fractions with same or related denominators, then convert answer into a mixed number; subtract fractions with same and related denominators, revise multiplying fractions by whole numbers

Use short division to divide 3-digit numbers by 1-digit numbers and 4-digit numbers by 1-digit numbers, including those which leave a remainder; express a remainder as a fraction; use long multiplication to multiply 3-digit and 4-digit numbers by teens numbers

Find the area and perimeter of squares and rectangles by calculation and pursue a line of enquiry; estimate and find the area of irregular shapes; calculate the perimeter and area of composite shapes; use the relations of area and perimeter to find unknown lengths; begin to understand the concept of volume; find the volume of a cube or cuboid by counting cubes; understand volume as measurement in three dimensions; relate volume to capacity; recognise and estimate volumes

Understand what percentages are, relating them to hundredths; know key equivalences between percentages and fractions, finding percentages of amounts of money; find equivalent fractions, decimals and percentages; solve problems involving fraction and percentage equivalents; write dates using Roman numerals

Find cubes of numbers to 10; draw and interpret line graphs showing change in temperature over time; begin to understand rate; use timetables using the 24-hour clock and use counting up to find time intervals of several hours and minutes; solve problems involving scaling by simple fractions; use factors to multiply; solve scaling problems involving measure |

Year 6						
Strands	**Number and place value Multiplication and division Shape Fractions Written Calculation Handling Data Using and Applying**	**Measurement Angles Mental Calculation Fractions Written Calculation Algebra Using and Applying**	**Number and Place Value Mental Multiplication and Division Shape Handling data Written Calculation Using and Applying**	**Number and Place Value Shape Fractions, decimals and percentages Measurement Handling Data Written Calculation Using and Applying**	**Shape Ratio and proportion Revision (planned according to areas of need)**	**Time Number Written Calculations Percentages Using and Applying**
Overview Summary	Multiply integers and decimals by 10, 100 or 1000 Divide integers by 10, 100 or 1000, and divide decimals by 10 or 100

Derive quickly multiplication and division facts Express a quotient as a fraction or a decimal

Odd and even numbers Find common multiples; find the smallest common multiple

Properties of 2D shapes, including parallelogram, rhombus and trapezium Classifying quadrilaterals

Constructing and using grouped frequency tables Drawing and interpreting bar graphs using grouped data

Adding two or more numbers less than 10000, using standard written methods Subtraction of two numbers less than 10 000 using standard written methods Adding two decimal numbers using standard column addition Subtracting two decimal numbers using standard written methods

Multiply ThHTU × U using standard methods | Use and convert between metric units of length; understand imperial units of length Use and convert between metric units of weight; understand imperial units of weight

Using a protractor to measure and draw acute and obtuse angles Calculate angles in a triangle

Add and subtract near multiples of 10, 100 and 1000 Mental subtraction strategies Doubling and halving multiples of 10 to 1000 and multiples of 100 to 10 000 Multiplying using doubling and halving

Changing an improper fraction to a mixed number, and vice versa Converting, reducing, comparing and ordering fractions

Divide HTU ÷ U using standard written methods Divide TU.t ÷ U using standard written methods

Read and plot co ordinates in all 4 quadrants | Rounding to the nearest 10, 100 or 1000 Rounding decimals to the nearest whole number or tenth Use decimal notation up to hundredths; order a set of decimals

Find all pairs of factors of any number up to 100 Multiplication: partitioning Multiplication: using close facts Read and plot coordinates in all quadrants

Properties of 3D shapes; visualise 3D shapes from 2D drawings Calculate the area of rectangles and compound shapes Calculate the area of a right-angled triangle

Averages: mean, median and mode Construct and interpret conversion graphs

Multiply HTU × TU using standard written methods Multiplying U.t × U and U.th × U using standard written methods | Adding and subtracting decimals Square numbers to at least 12 × 12 Recognise and extend number sequences, including triangular numbers Recognise prime numbers to at least 20 Know and apply tests of divisibility

Use a fraction as an operator to find fractions of amounts Order fractions and decimals; convert a fraction to a decimal using division Find simple percentages; express simple fractions as percentages

Order and find the difference between positive and negative numbers

Use and convert between metric units of capacity; understand imperial units of capacity Calculate perimeters of rectangles and compound shapes

Recognise events that are equally likely; introduce a probability scale Begin to interpret a pie chart | Reflection in up to two mirror lines Rotation and translation

Understand the concept of proportion Relate ratio to proportion; solve simple problems involving ratio and proportion | Relationships between units of time; time-zones around the world

Factorise numbers up to 100 into prime factors

Read and interpret line graphs

Calculate the area of rectangles and compound shapes

Solve money problems

Use standard written methods of addition and subtraction

Find simple percentages; express simple fractions as percentages |