

Strands	Autumn 1 Summary
<p>MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra</p> <p>NPV Number and place value; MAS Mental addition and subtraction</p> <p>MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division; FRP Fractions, ratio and proportion</p> <p>MEA Measurement; DPE Decimals, percentages and their equivalence to fractions</p> <p>WAS Written addition and subtraction</p>	<p>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</p> <p>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</p> <p>Learn \times and \div 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</p> <p>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</p> <p>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)</p>

Strands	Autumn 2 Summary
<p>MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; FRP Fractions, ratio and proportion</p> <p>DPE Decimals, percentages and their equivalence to fractions; NPV Number and place value; WAS Written addition and subtraction; MAS Mental addition and subtraction</p> <p>DPE Decimals, percentages and their equivalence to fractions; MEA Measurement; STA Statistics; PRA Problem solving, reasoning and algebra</p> <p>NPV Number and place value; WAS Written addition and subtraction; MAS Mental addition and subtraction</p> <p>MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra</p>	<ul style="list-style-type: none"> • 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 and record all possible amounts 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; solve addition and subtraction problems using concrete and pictorial representations • 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; Solve addition and subtraction problems using concrete and pictorial representations; 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

Strands	Spring 1 Summary
<ul style="list-style-type: none"> • NPV Number and place value; PRA Problem solving, reasoning and algebra • WAS Written addition and subtraction; MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MEA Measurement • MMD Mental multiplication and division; FRP Fractions, ratio and proportion; PRA Problem solving, reasoning and algebra • GPS Geometry: properties of shapes; PRA Problem solving, reasoning and algebra • MMD Mental multiplication and division; WMD Written multiplication and division; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra 	<ul style="list-style-type: none"> • 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× table and ‘tricky’ facts; use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; solve simple money problems with decimals to two decimal places • 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 and explain reasoning; 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

Strands	Spring 2 Summary
<ul style="list-style-type: none"> • DPE Decimals, percentages and their equivalence to fractions; NPV Number and place value; PRA Problem solving, reasoning and algebra; WAS Written addition and subtraction • MAS Mental addition and subtraction; WAS Written addition and subtraction; MEA Measurement; PRA Problem solving, reasoning and algebra • MEA Measurement; PRA Problem solving, reasoning and algebra • NPV Number and place value; WAS Written addition and subtraction; MAS Mental addition and subtraction • WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction; WAS Written addition and subtraction 	<ul style="list-style-type: none"> • Recognise, use, compare and order decimal numbers; understand place value in decimal numbers; recognise that decimals are tenths; round decimal 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

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<ul style="list-style-type: none"> • MAS Mental addition and subtraction; MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra • WAS Written addition and subtraction; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction • GPD Geometry: position and direction; STA Statistics • WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MMD Mental multiplication and division; FRP Fractions, ratio and proportion; DPE Decimals, percentages 	<ul style="list-style-type: none"> • 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 minus 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

<p>and their equivalence to fractions</p> <ul style="list-style-type: none">• MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division; FRP Fractions, ratio and proportion	<p>by 1-digit numbers to give answers between 20 and 50, with and without remainders; find non-unit fractions of amounts</p>
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