| Strands | Autumn 1 Summary |
| :---: | :---: |
| - MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra <br> - NPV Number and place value; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra <br> - MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra <br> - PRA Problem solving, reasoning and algebra; MEA Measurement; GPS Geometry: properties of shapes; STA Statistics <br> - NPV Number and place value; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra | - 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 <br> - Compare and order 2- and 3- digit numbers; count on and back in 10 s and 1 s ; add and subtract 2 -digit numbers; solve problems using place value <br> - Know multiplication and division facts for the 5, 10, 2, 4 and 3 times-tables; doubling and halving <br> - 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 <br> - Comparing, ordering and understanding place value of 2and 3-digit numbers; subtracting from 2-digit numbers; using prediction to estimate calculations |

## Strands

- MMD Mental multiplication and division; FRP Fractions, ratio and proportion; PRA Problem solving, reasoning and algebra
- MEA Measurement; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction
- MEA Measurement; GPS Geometry: properties of shapes
- NPV Number and place value; MAS Menta addition and subtraction; PRA Problem solving, reasoning and algebra
- MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction


## Autumn 2 Summary

- 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 3digit 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
- NPV Number and place value; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra
- MAS Mental addition and subtraction; MMD Mental multiplication and division; STA Statistics; PRA Problem solving, reasoning and algebra
- FRP Fractions, ratio and proportion; PRA Problem solving, reasoning and algebra
- GPS Geometry: properties of shapes; GPD Geometry: position and direction; MEA Measurement
- NPV Number and place value; MAS Mental addition and subtraction
- 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 $1 / 2 \mathrm{~s}, 1 / 3 \mathrm{~s}, 1 / 4, \mathrm{~s} 1 / 6 \mathrm{~s}$, and $1 / 8 \mathrm{~s}$; 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 $90^{\circ}$; understand angles are measured in degrees; recognise ${ }^{\circ}$ 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 $360^{\circ}$ is a full turn; begin to understand angles and identify size of angles in relation to $90^{\circ}$
- 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
- 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; PRA Problem solving, reasoning and algebra
- MEA Measurement
- NPV Number and place value; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra
- MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra
- 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 3digit 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
- MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra; FRP Fractions, ratio and proportion
- MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division
- MMD Mental multiplication and division; WMD Written multiplication and division
- STA Statistics; PRA Problem solving, reasoning and algebra; MEA Measurement
- MAS Mental addition and subtraction; WAS Written addition and subtraction; PRA Problem solving, reasoning and algebra
- Add 3-digit and 1-digit numbers mentally, using number facts; subtract 1digit 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 100 s; 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 bar charts and pictograms where one square/symbol represents two units; compare and measure weights in multiples of 100 g ; know how many grams are in a kilogram; estimate and weigh objects to the nearest 100 g ; 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 reasoning, trial and improvement to solve problems involving more complex addition

| Strands | Summer 2 Summary |
| :---: | :---: |
| - WAS Written addition and subtraction; MAS Mental addition and subtraction <br> - WAS Written addition and subtraction; MEA Measurement; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra <br> - GPS Geometry: properties of shapes; MEA Measurement <br> - WMD Written multiplication and division; PRA Problem solving, reasoning and algebra; MMD Mental multiplication and division; FRP Fractions, ratio and proportion; DPE Decimals, percentages and their equivalence to fractions <br> - MAS Mental addition and subtraction; WAS Written addition and subtraction; PRA Problem solving, reasoning and algebra; WMD Written multiplication and division; MMD Mental multiplication and division | - Use column addition to add three 2- and 3-digit numbers together and four 2-and 3-digit numbers together; subtract 3digit numbers using counting up; solve word problems choosing an appropriate method <br> - 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 <br> - 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 <br> - 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 <br> - 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 |

