**Plan:** Abacus Year 3 **School Name:** Deanshanger Primary School

## Year 3, Autumn Term 1

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

## Year 3, Autumn Term 2

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| Wk | Strands | Weekly Summary |
| 6 | **MMD** Mental multiplication and division; **FRP** Fractions, ratio and proportion; **PRA** Problem solving, reasoning and algebra | Doubling and halving numbers up to 100 using partitioning; understanding fractions and fractions of numbers |
| 7 | **MEA** Measurement; **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction | 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. |
| 8 | **MEA** Measurement; **GPS** Geometry: properties of shapes | 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 |
| 9 | **NPV** Number and place value; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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 |
| 10 | **MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction | Revise times-tables learned and derive division facts; perform division with remainders; choose a mental strategy to solve additions and subtractions; solve word problems |

## Year 3, Spring Term 1

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| Wk | Strands | Weekly Summary |
| 11 | **NPV** Number and place value; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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. |
| 12 | **MAS** Mental addition and subtraction; **MMD** Mental multiplication and division; **STA** Statistics; **PRA** Problem solving, reasoning and algebra | 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 |
| 13 | **FRP** Fractions, ratio and proportion; **PRA** Problem solving, reasoning and algebra | 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 |
| 14 | **GPS** Geometry: properties of shapes; **GPD** Geometry: position and direction; **MEA** Measurement | 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° |
| 15 | **NPV** Number and place value; **MAS** Mental addition and subtraction | 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 |

## Year 3, Spring Term 2

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| Wk | Strands | Weekly Summary |
| 16 | **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **WAS** Written addition and subtraction | 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) |
| 17 | **MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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) |
| 18 | **MEA** Measurement | 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 |
| 19 | **NPV** Number and place value; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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 |
| 20 | **MMD** Mental multiplication and division; **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra | 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 |

## Year 3, Summer Term 1

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| Wk | Strands | Weekly Summary |
| 21 | **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra; **FRP** Fractions, ratio and proportion | 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 |
| 22 | **MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra; **WMD** Written multiplication and division | 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 |
| 23 | **MMD** Mental multiplication and division; **WMD** Written multiplication and division | 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 |
| 24 | **STA** Statistics; **PRA** Problem solving, reasoning and algebra; **MEA** Measurement | Draw and interpret bar charts 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 |
| 25 | **MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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 |

## Year 3, Summer Term 2

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| Wk | Strands | Weekly Summary |
| 26 | **WAS** Written addition and subtraction; **MAS** Mental addition and subtraction | 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 |
| 27 | **WAS** Written addition and subtraction; **MEA** Measurement; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra | 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 |
| 28 | **GPS** Geometry: properties of shapes; **MEA** Measurement | 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 |
| 29 | **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 | 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 |
| 30 | **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 | 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 |