# Strands

- **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra
- MAS Mental addition and subtraction;
   PRA Problem solving, reasoning and algebra
- MMD Mental multiplication and division; MAS Mental addition and subtraction; PRA Problem solving, reasoning and algebra
- GPS Geometry: properties of shapes;
   STA Statistics
- NPV Number and place value; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction

### Autumn 1 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, investigate 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, work systematically to find all possible inequalities, 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 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;

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- GPD Geometry: position and direction;
   MEA Measurement
- MAS Mental addition and subtraction;
   PRA Problem solving, reasoning and algebra;
   MMD Mental multiplication and division
- MMD Mental multiplication and division; MEA Measurement; PRA Problem solving, reasoning and algebra

# Autumn 2 Summary

- 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.
- Place value and ordering 2-digit numbers; place value additions and subtractions; add and begin to subtract 9, 10 and 11
- Rehearse complements to multiples of 10; find differences using a number line; find change from 10p

- GPS Geometry: properties of shapes;
   GPD Geometry: position and direction;
   MEA Measurement
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   PRA Problem solving, reasoning and algebra; MEA Measurement
- NPV Number and place value
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- 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  $\frac{1}{2}$
- 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</li>
- 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; investigate multiplications with the same answer; write multiplications to go with arrays, rotate arrays to show they are commutative

#### Strands

- MMD Mental multiplication and division;
- FRP Fractions, ratio and proportion
- PRA Problem solving, reasoning and algebra
- **MEA** Measurement; **STA** Statistics
- MMD Mental multiplication and division; PRA Problem solving, reasoning and algebra
- MEA Measurement; NPV Number and place value; PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction
- **FRP** Fractions, ratio and proportion

## Spring 1 Summary

- 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
- 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
- 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
- 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); spot patterns and make predictions when finding a third of numbers

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- MAS Mental addition and subtraction;
   NPV Number and place value; MEA
   Measurement; PRA Problem solving,
   reasoning and algebra
- MMD Mental multiplication and division;
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- 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
- 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
- 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 place
- 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

ints (sharing); spot patterns and make predictions finding a third of numbers

Strands	Summer 1 Summary
	SATs revision and SATs papers

Strands	Summer 2 Summary
<ul> <li>PRA Problem solving, reasoning and algebra; MAS Mental addition and subtraction</li> <li>MMD Mental multiplication and division</li> <li>MEA Measurement</li> <li>NPV Number and place value</li> <li>GPS Geometry: properties of shapes;</li> <li>MMD Mental multiplication and division</li> <li>PRA Problem solving, reasoning and algebra</li> </ul>	<ul> <li>2 step word problems</li> <li>Maths puzzles- NRICH</li> <li>Mathematical challenges for more able children</li> <li>Start bronze multiplication tests</li> <li>Start TTRS</li> <li>Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts</li> <li>Use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + []; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc)</li> <li>Division with remainders</li> <li>Telling the time to 5 minutes and time problems</li> <li>Read scales where not all numbers on the scale are given and estimate points in between</li> <li>describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).</li> <li>Introduction to HTU place value</li> <li>Introduction to 4x tables and corresponding division facts</li> </ul>