

Tavistock Maths Planning Overview for Year 1
Adapted from Hampshire Maths Team documents

Autumn 1	Spring 1	Summer 1
<p>Number and Place Value Continue and extend counting skills – counting in ones, forwards and backwards to at least 30, then 50.</p> <p>Count, read and write numbers to 20 in numerals, then extending to 30 / 50. Begin to write some numbers to 20 in words.</p> <p>Understand what each digit represents in numbers to 20, and represent these numbers with structured resources. Partition a tens number.</p> <p>Begin to recognize the significance of “ten” in the number system.</p> <p>Begin to recognize multiples of ten and count in tens forwards and backwards.</p> <p>Count in 2’s forwards and backwards</p> <p>Represent and order numbers to 20, knowing “one more” and “one less” than any number to 10/20.</p> <p>Begin to start doubling numbers and halving numbers.</p> <p>Estimate objects to 20.</p> <p>Addition and Subtraction Understand addition as combining 2 groups and more and start to use symbols + and =.</p> <p>Partition numbers to 10. Eg: 3+3, 2+4, 5+1</p> <p>Begin to work out number facts for 10 and numbers within 10.</p> <p>Adding 2 or 3 sets of numbers together using apparatus.</p>	<p>Number and Place Value Continue and extend counting skills – counting in ones, forwards and backwards to 100. Count in 10’s forwards and backwards. Count in 2’s forwards and backwards.</p> <p>Writing numbers in words to 20.</p> <p>Count, read and write numbers to 50 in numerals, then extending to 100.</p> <p>Understand what each digit represents in two –digit numbers to 50 and represent these numbers with structured resources.</p> <p>Recognize the significance of “ten” in the number system.</p> <p>Count in multiples of 5.</p> <p>Represent and order numbers to 50, knowing “one more” and “one less” than any number to 50. Begin to extend this to 100.</p> <p>Know the number that is ten more / ten less than any two digit number and explain which digit changes and why.</p> <p>Recall and know securely number facts for 10 and numbers within 10.</p> <p>Begin doubling and halving numbers to 20.</p> <p>Estimate objects to 50.</p> <p>Addition and Subtraction Mentally subtract and add 1 from any number to 10 and write the operation.</p> <p>Add/subtract any pair of single digit numbers mentally.</p>	<p>Number and Place Value Continue and extend counting skills – counting in ones, 2’s, 5’s and 10’s forwards and backwards to 100 and beyond (to or from any given number). Understand vocabulary of comparing, ordering and positioning numbers.</p> <p>Count, read and write numbers to 100 in numerals.</p> <p>Understand what each digit represents in two –digit numbers and represent these numbers with structured resources in a variety of ways.</p> <p>Represent and order numbers to 100, knowing “one more” and “one less” than any number to 100.</p> <p>Compare numbers and quantities, using the language of equal to, more than, less than (fewer), most, least</p> <p>Read and write numbers to 20 in words.</p> <p>Halving and doubling numbers to 20.</p> <p>Know the number that is ten more / ten less than any two digit number and explain which digit changes and why.</p> <p>Addition and Subtraction Contextual addition and subtraction problems within 30, using “+”, “-” and “=” symbols.</p> <p>Know all pairs of numbers for 20. Begin to work systematically to work out corresponding subtraction fact.</p> <p>Use a number line to support addition and subtraction – counting on for addition and counting back for subtraction.</p>

<p>Understand subtraction as taking away from a group and less and begin to use symbols – and =.</p> <p>Use knowledge of pairs making numbers to 10 to solve simple problems.</p> <p>Time- chronological events and vocabulary Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening Recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>Contextual addition and subtraction problems within 30 - begin to use “+”, “-” and “=” symbols with understanding.</p> <p>Explore number bonds to 20, applying knowledge of number bonds to 10.</p> <p>Use a number line to support addition and subtraction – counting on for addition and counting back for subtraction.</p> <p>Know and understand that addition can be done in any order (commutativity) but subtraction cannot.</p> <p>Use knowledge of number bonds to begin to add some numbers mentally</p> <p>Begin to add/subtract using jumps of ten and one using a structured number line for support.</p> <p>Begin to understand the relationship between addition and subtraction, knowing that, for example, if $7 + 3 = 10$, then $3 + 7 = 10$, $10 - 7 = 3$ and $10 - 3 = 7$</p> <p>Measures – language of comparisons for Length, Mass/weight, Volume, Capacity Compare lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) , compare mass or weight (e.g. heavy/light, heavier than, lighter than), compare capacity/volume (full/empty, more than, less than, quarter), compare time (quicker, slower, earlier, later) Estimating lengths, heights, mass, weights, capacity and time Check estimates with non-standard measures Compare non-standard measures (e.g. the difference between a teacher’s hand span and a doll’s hand span)</p>	<p>Know and understand that addition can be done in any order (commutativity) but subtraction cannot.</p> <p>Begin to add/subtract using jumps of ten and one using a structured number for support.</p> <p>Understand the relationship between addition and subtraction, knowing that, for example, if $7 + 3 = 10$, then $3 + 7 = 10$, $10 - 7 = 3$ and $10 - 3 = 7$.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems e.g. $7 = ? - 9$.</p> <p>Multiplication and Division Count in multiples of twos, fives and tens (forwards and backwards)</p> <p>Develop understanding of multiplication as lots of, repeated addition and multiply using resources and visual images to support (including arrays)</p> <p>Solve problems involving grouping and sharing small quantities</p> <p>Use doubling as a strategy to solve problems.</p> <p>Solve one step problems involving multiplication and division by calculating the answer using concrete object and pictorial representations</p>
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Autumn 2	Spring 2	Summer 2
<p>Addition and Subtraction Begin to use a number line for addition and subtraction – counting all, then counting on for addition and counting back for subtraction. Use practical objects / pictures on a number line.</p> <p>Practical addition and subtraction problems within 20 – independent recording. Teen to a single digit number.</p> <p>Mentally start to solve simple addition and subtraction problems.</p> <p>Recognise and devise repeating patterns.</p> <p>Money Begin to recognise and know the value of different denominations of coins and notes (1p, 2p, 5p, 10p, 20p, 50p, £1, £2, £5, £10, £20) making links to understanding of number and calculation.</p> <p>Shape- 2D and 3D Recognise 2D and 3D shapes Name 2D shapes e.g. rectangles (including squares), circles and triangles) Name 3D shapes (e.g. cuboids, (Including cubes, pyramids and spheres) Recognise these shapes in different orientations and sizes. Know that rectangles, triangles, cuboids and pyramids can be different shapes (i.e. irregular). Use mathematical language to describe shapes and their properties e.g. vertices, sides, edges, faces.</p>	<p>Multiplication and Division Explore, make, continue and describe patterns including number patterns.</p> <p>Solve problems involving grouping and sharing small quantities.</p> <p>Begin to record solutions using pictorial representations.</p> <p>Begin to double quantities of objects.</p> <p>Begin to make connections between arrays, number patterns and counting in twos, fives and tens</p> <p>Begin to understand multiplication as lots of.</p> <p>Fractions Find one half and a quarter of a shape.</p> <p>Begin to find half or a quarter of a quantity.</p> <p>Shape- Position and Direction Describe position, directions and movements. Use the language of position, direction and motion including left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close, far, up and down, forwards and backwards, inside and outside. Make half, quarter and three quarter turns in a clockwise direction.</p>	<p>Fractions Recognise and find halves and quarters of shapes and objects</p> <p>Connect halves and quarters to the equal sharing and grouping of sets through problem solving</p> <p>Through practical work, begin to use “half” e.g. in measures – “half full” “half empty”, “half a metre”, “half as big” etc. Combine different quantities of halves and quarters to make a whole using practical resources (e.g. $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{4}$ is a whole)</p> <p>Record halves and quarters as $\frac{1}{2}$ and $\frac{1}{4}$ Begin to see the connection between fractions and division – e.g. dividing/sharing by 2 means half each.</p> <p>Time- Reading clocks Time (hours, minutes, seconds)</p> <p>Measures – Units of measure for Length, Mass/weight, Volume, Capacity Measure and begin to record the following: Lengths and heights Mass/weight Capacity and volume</p>
<p>Problem Solving Use mathematics as an integral part of classroom activities, e.g. engage with mathematical activities involving sorting, counting and measuring by direct comparison, begin to understand the relevance of mathematical ideas to everyday situations by using them in role play Select the mathematics they use in some classroom activities, e.g. find a starting point or identify key information Begin to use heuristics (apparatus, diagrams, role play etc.) to represent and clarify a problem Move between different representations of a problem, e.g. words, diagrams</p>		

Adopt a suggested model or systematic approach to a problem
Make connections and apply their knowledge to similar situations
Begin to apply knowledge appropriately to problem-solving

Reasoning and Dialogue

Represent their work using objects or pictures
Begin to discuss their work
Begin to use some mathematical language when discussing their work
Begin to work using symbols and simple diagrams
Draw simple conclusions from their work
Explain why an answer is correct
Predict what comes next in a simple sequence and explain why