## Year 2 Autumn Term - Medium term plan

| Weeks | Key knowledge | Previous experience <br> (NCETM Guidance) <br> Support gaps in learning | National Curriculum statement | Links to PD Materials from NCETM to support subject knowledge and small steps |
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| Weeks 1-2 | Number and place value <br> Comparing and ordering Understanding of relative position of numbers <br> Knows the properties of two-digit numbers. <br> Knows that counting can be done in varying step sizes. <br> Partitioning and recombining of 2-digit numbers <br> Rearrangement of 2-digit numbers <br> To read, write and say numbers 0-100 (cross the hundred boundary) <br> Counting | Know that 10 ones are equivalent to 1 ten. <br> Know that multiples of 10 are made up from a number of tens, for example, 50 is 5 tens. Place the numbers 1 to 9 on a marked, but unlabelled, 0 to 10 number line. <br> Estimate the position of the numbers 1 to 9 on an unmarked 0 to 10 number line. <br> Count forwards and backwards to and from 100. Knows the base ten values of two-digit numbers. | To count in steps of 2,3 , and 5 from 0 , and count in tens from any number, forward or backward. <br> To recognise the place value of each digit in a twodigit number (tens, ones). <br> To identify, represent and estimate numbers using different representations, including the number line. <br> To compare and order numbers from 0 up to 100; use <, > and = signs. <br> To read and write numbers to at least 100 in numerals and in words. <br> To use place value and number facts to solve problems. | Year 1-1.9 Composition of numbers 20-100. <br> Year 11.10 composition of number TP 1\&2 <br> Year 1-1.1 TP 2 and 3 : <br> Comparison of quantity and measures. <br> MNP/ Powermaths/ WR <br> Place value: values of the digits <br> Tens and ones structure Representing numbers |
| Weeks 3-7 | Calculation: Addition and subtraction <br> Strategy development for addition and subtraction <br> Reordering calculation <br> Bridging ten <br> Partitioning strategies: <br> Concrete, visual and number facts <br> Inverse relationships <br> Commutativity for addition and non- <br> community for subtraction <br> Knows number bonds to 20. <br> Knows efficient strategies for adding and <br> subtracting for up to two 2-digit | Develop fluency in addition and subtraction facts within 10. <br> Knows how to add and subtract one-digit and twodigit numbers to 20 , including zero. <br> Learn and use number bonds to 10 , for example: $8+?=10$ <br> Partition numbers within 10, for example $5=3+2$ | To solve problems with addition and subtraction: <br> - Using concrete objects and pictorial representations, including those involving numbers, quantities and measures <br> - Applying their increasing knowledge of mental and written methods. <br> - To recall and use addition and subtraction facts to 20 fluently, <br> - To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. | Year 2-1. 11 Addition and subtraction bridging 10 <br> 1.12 Subtraction as difference <br> 1.13 Addition and subtraction: two-digit and single-digit numbers |


|  | numbers. | Solve missing addend problems within 10, for example: $4+?=10$ <br> Add and subtract within 10, for example: $\begin{aligned} & 6+3=9 \\ & 6-2=4 \end{aligned}$ <br> Know that a multiple of 10 is made up from a number of tens, for example, 50 is 5 tens. | - To show that addition can be done in any order (commutative) and subtraction cannot. <br> - To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. |  |
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| Week 8-11 | Multiplication and division: <br> Concept of repeated addition and the model of the array Concept of sharing and grouping model of the dividend Equals groups of Inverse relationships Concept of multiplication is communicative but division is noncommunicative To read and write the symbols of $\div x$ Odd and even multiples Multiplication 2's, 5's and 10's (these must be practiced daily throughout the year) <br> Understand what multiplication means and what it looks like. <br> Patterns in multiplication and commutative law. <br> Understand that multiplication is the same as repeated addition of equal groups. <br> Use repeated addition as a strategy. Use concrete materials to show equal | Count in multiples of 2,5 and 10. <br> Count in multiples of 2,5 and 10 to find how many groups of 2,5 or 10 there are in a particular quantity, set in everyday contexts. | To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication ( $\times$ ) and equals (=) signs. <br> To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. <br> To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. | 2.2 Structures: multiplication representing equal groups 2.4 Times tables: groups of 10 and of 5 , and factors of 0 and 1 <br> 2.3 Times tables: groups of 2 and commutativity (part 1) 2.6 Structures: quotitive and partitive division (the remainder needs looking at in depth in the summer term). |


|  | groups. <br> Use drawings or pictures to show equal <br> groups. <br> Know that multiplication is a more <br> efficient way of addition <br> Complete number sentences using the <br> correct multiplication facts or number <br> sentences | Measurement: length <br> Knows the standard units of measure for length, mass and capacity. <br> To be able to choose the right measuring equipment to measure a length <br> of height <br> The skills to reading the marked division with accuracy <br> Understanding the marked division in any measuring context. <br> Read scales in division of ones, two's fives and tens (EXP) <br> Reading a scale where not all the divisions are marked (GD) <br> Understanding that there are 100cm in 1 metre <br> Knowing the mass is measurement in kg and grams <br> Knowing the capacity is measurement in ml and litres | To choose and use appropriate standard units to <br> estimate and measure length/ height in any <br> direction (m/cm/mm); mass (kg/g); temperature <br> ( $\left.{ }^{\circ} \mathrm{C}\right) ;$ volume and capacity (litres/ml) to the nearest <br> appropriate unit using rulers, scales, thermometers <br> and measuring vessels. <br> To compare and order lengths, mass, <br> volume/capacity and record the results using <br> $>,<$ and $=$. |
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| MNP/Powermaths/WR <br> Comparing length <br> Ordering length <br> Solve problems involving <br> length |  |  |  |

