

Week	Key knowledge	Previous experience (NCETM Guidance) Support gaps in learning	Curriculum statement (End of Year 1) Be advised that you might need to revisit this concept later in the year.	Notes and NCETM references
Weeks 1-2	<p>Number and place value Read, write and say numbers up to 4 digits To know the value of each digit on three/four-digit numbers Identifying the correct digit when rounding to the nearest 10, 100 or 1000 Rearranging the number eg $142 = 100 + 30 + 12$ (getting ready for exchange) Count in hundreds to 1000. Count in hundreds, tens and ones Use pictures, number line and number squares to count in fifties. Recognize and complete number patterns Count in tens and regroup 10 tens to make 1 hundred. Understand the relationship between counting in fours and counting in eights. Knows the properties of three-digit numbers.</p>	<p>Know that 10 ones are equivalent to 1 ten, and that 40 (for example) can be composed from 40 ones or 4 tens. Know how many tens there are in multiples of 10 up to 100.</p> <p>Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.</p> <p>Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.</p> <p>Count in multiples of 2, 5 and 10.</p>	<p>Count from 0 in multiples of 100; Find 10 or 100 more or less than a given number. Read and write numbers up to 1000 in numerals and in words. Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones). Identify, represent and estimate numbers using different representations. Compare and order numbers up to 1000. Count from 0 in multiples of 50. Count from 0 in multiples of 4 and 8. Solve number problems and practical problems involving these ideas.</p>	<p>MNP/Powermaths books can support planning of place value</p> <p>1.18 TP 2 and 3</p> <p>Composition of 100 = 1.17 TP1</p> <p>1.18 TP 4 three-digit multiples of 10 can be expressed multiplicatively and additively, in terms of tens or hundreds.</p> <p>3-digit numbers can be composed additively from hundreds, tens and ones – this structure can be used to support additive calculation = 1.18 TP1</p> <p>Familiar counting sequences can be extended up to 1,000. = 1.18 TP6</p>
Weeks 3-7	<p>Calculation and arithmetic of addition and subtraction</p> <p>Complements to 100 (eg $20 + 80 = 100$, $67 + 33 = 100$) and all 2-digits numbers</p>	<p>Add and subtract across 10, for example:</p> <p>$8 + 5 = 13$</p> <p>$13 - 5 = 8$</p>	<p>To add and subtract numbers mentally.</p> <p>To add and subtract numbers using columnar methods</p>	<p>Complements to 100 = 1.17 TP 2</p> <p>Crossing tens boundary = 1.17 TP3</p>

	<p>within 100</p> <p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice</p> <p>Understand and find the addition/subtraction facts for any 2 numbers</p> <p>Application of appropriate mental strategies when the numbers are easy to manipulate $58 + 22 = 60 + 20$</p> <p>Using rounding to check the reasonableness of the answer Understanding the columns</p> <p>Understanding the process of where to start and how to track through the written method</p> <p>No crossing of boundaries</p> <p>Crossing of boundaries (generating an exchanging digit)</p>	<p>Automatically recall addition and subtraction facts within 10, and across 10.</p> <p>Unitise in tens: understand that 10 can be thought of as a single unit of 1 ten.</p> <p>Automatically recall number bonds to 9 and to 10.</p> <p>Know that 10 ones are equivalent to 1 ten, and 10 tens are equivalent to 1 hundred.</p> <p>Automatically recall addition and subtraction facts within 10 and across 10.</p> <p>Recognise the place value of each digit in two- and three-digit numbers.</p> <p>Know that 10 ones are equivalent to 1 ten, and 10 tens are equivalent to 1 hundred.</p> <p>Have experience with the commutative property of addition, for example, have recognised that $3 + 2$ and $2 + 3$ have the same sum.</p> <p>Be able to write an equation in different ways, for example, have recognised that $3 + 2 = 5$ and $5 = 2 + 3$</p> <p>Write equations to represent addition and subtraction contexts.</p>	<p>To estimate the answer to a calculation and use inverse operations to check answers</p> <p>To solve addition and subtraction problems</p> <p>Solve problems, including missing number problems, using number facts, place value and more complex addition. =1.19 TP4</p>	<p>Crossing hundreds = 1.17 TP4</p> <p>Known facts and strategies for addition and subtraction within and across ten, and within and across 100, can be used to support additive calculation within 1,000 = 1.18 TP5</p> <p>1.19 TP1 addition of two digit numbers, and how this supports addition of three digit numbers.</p> <p>Transforming addition calculations into equivalent calculations can support efficient mental strategies. =1.19 TP2</p> <p>Subtraction – using find the difference strategy =1.19 TP3</p> <p>Column addition 1.20 TP1/2/3/4/5</p> <p>Column subtraction 1.21 TP1/2</p>
<p>Autumn themes integrated into number: staircase project or fire and ice project (to be confirmed)</p> <p>Contextualised learning: look for opportunities within topic curriculum</p>				

<p>Weeks 8-10</p>	<p>Multiplication and division: (These must be practiced daily throughout the year) Learn how to multiply and divide by 3's, 4's and 8's. Recognise patterns and relationships between times tables Begin to understand mathematical vocabulary such as 'quotient' in relation to division. Calculate multiplication equations using the multiplication facts that they know. Apply tables knowledge in the context of place value eg $6 \times 7 = 42$ and 60×7 etc Understanding the relationships between the multiplication and division statements eg $6 \times 7 = 42$, $7 \times 6 = 42$ and $42 \div 7 = 6$ Facts and mental to written methods Understand the difference between sharing and grouping Understand the commutative law in multiplication. Solve problems involving multiplication and division.</p>	<p>Calculate products within the 2, 5 and 10 multiplication tables. Knows and recognises the inverse relationship between multiplication and division in calculations.</p>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods. Use place value, known and derived facts to multiply and divide mentally.</p>	<p>2:7 Times tables: 2,4 and 8, and the relationship between them. https://www.ncetm.org.uk/resources/53130 TP 1 TP 2 TP 3 TP 4 TP 5 Divisibility rules Y4 2.14 TP1 (partitioning to multiply 2d x 1d) Y4 2.14 TP2 (short method for multiplication)</p>
<p>Weeks 11-12</p>	<p>Calculation and arithmetic : Multiplication and division Understand the relationship between multiplying by a 1-digit number and its multiple of 10. Mental strategies for partitioning for multiplication (96×6 could be 90×6 and 6×6)</p>	<p>Recognise repeated addition contexts and represent them with multiplication equations. Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).</p>	<p>To recognise and use commutativity in mental calculations To use a formal written method for multiplication and division. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in</p>	<p>Y4 2.14 TP1 (partitioning to multiply 2d x 1d) Y4 2.14 TP2 (short method for multiplication)</p>

	<p>Mental strategies for rearranging for division ($96 \div 6$ could be partitioned into $60 \div 6$ and $36 \div 6$) distributive law Grid to short standard method Short division method backed up by models and images (refer to calculation on policy)</p>		<p>which n objects are connected to m objects.</p>	<p>Y4 2.15 TP1 (Partitioning to divide) Y4 2.15 TP2 (Short method for division)</p>
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