

# AUTUMN TERM MATHEMATICS OVERVIEW – YEAR 3

Daily Mathematics Lesson – 1 hour (one/two lessons each week to be a discrete arithmetic lesson)

1 x 30 minute discrete times tables lesson – Y3 target - 66 challenge (TTRS/use of tackling times table cards for early morning work)

| BLOCKS                 | NATIONAL CURRICULUM OBJECTIVES<br>KEY OBJECTIVES                                                                                                                                                                                                                                                                                                                                                                                           | SMALL STEPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | READY TO PROGRESS CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Linked Step                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |
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| Place Value<br>3 weeks | <ul style="list-style-type: none"> <li>❖ identify, represent and estimate numbers using different representations</li> <li>❖ read and write numbers up to 1000 in numerals and in words</li> <li>❖ recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</li> <li>❖ <b>compare and order numbers up to 1000</b></li> <li>❖ solve number problems and practical problems involving these ideas</li> </ul> | <ul style="list-style-type: none"> <li>• Represent number to 100</li> <li>• Partition numbers</li> <li>• Number line to 100</li> <li>• <b>Hundreds</b></li> <li>• <b>Represent numbers to 1000</b></li> <li>• <b>Partition numbers to 1000</b></li> <li>• <b>Flexible partitioning of numbers to 1000</b></li> <li>• <b>Hundreds, tens and ones</b></li> <li>• <b>Find 1, 10 or 100 more or less</b></li> <li>• <b>Number line to 1000</b></li> <li>• <b>Estimate on number line to 1000</b></li> <li>• <b>Compare numbers to 1000</b></li> <li>• <b>Order numbers to 1000</b></li> <li>• <b>Count in 50s</b></li> </ul> | <p><b>3NPV-1</b> Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10</p> <p><b>3NPV-2</b> Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and nonstandard partitioning.</p> <p><b>3NPV-3</b> Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10</p> <p><b>3NPV-4</b> Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts</p> | <ul style="list-style-type: none"> <li>• <b>Hundreds</b></li> <li>• <b>Represent numbers to 1000</b></li> <li>• <b>Partition numbers to 1000</b></li> <li>• <b>Flexible partitioning of numbers to 1000</b></li> <li>• <b>Hundreds, tens and ones</b></li> <li>• <b>Find 1, 10 or 100 more or less</b></li> <li>• <b>Number line to 1000</b></li> <li>• <b>Estimate on number line to 1000</b></li> <li>• <b>Compare numbers to 1000</b></li> <li>• <b>Order numbers to 1000</b></li> <li>• <b>Number line to 1000</b></li> <li>• <b>Estimate on number line to 1000</b></li> <li>• <b>Count in 50s</b></li> </ul> | End of block assessment |

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| Addition & Subtraction<br>5 weeks | <ul style="list-style-type: none"> <li>❖ <b>add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds</b></li> <li>❖ <b>add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</b></li> <li>❖ solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li> </ul> | <ul style="list-style-type: none"> <li>• Apply number bonds within 10</li> <li>• Add and subtract 1s</li> <li>• Add and subtract 10s</li> <li>• Add and subtract 100s</li> <li>• Spot the pattern</li> <li>• <b>Add 1s across 10</b></li> <li>• <b>Add 10s across a 100</b></li> <li>• <b>Subtract 1s across a 10</b></li> <li>• <b>Subtract 10s across a 100</b></li> <li>• Make connections</li> <li>• <b>Add two numbers (no exchange)</b></li> <li>• <b>Subtract two numbers (no exchange)</b></li> <li>• <b>Add two numbers (across a 10)</b></li> <li>• <b>Add two numbers (across a 100)</b></li> <li>• <b>Subtract two numbers (across a 10)</b></li> <li>• <b>Subtract two numbers (across a 100)</b></li> <li>• <b>Add two-digit and 3-digit numbers</b></li> <li>• <b>Subtract a two-digit number from a 3-digit number</b></li> <li>• <b>Complements to 100</b></li> <li>• Estimate answers</li> <li>• <b>Inverse operations</b></li> <li>• <b>Make decisions</b></li> </ul> | <p><b>3NF-1</b> Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p> <p><b>3AS-1</b> Calculate complements to 100</p> <p><b>3AS-2</b> Add and subtract up to three-digit numbers using columnar methods.</p> <p><b>3AS-3</b> Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</p> | <ul style="list-style-type: none"> <li>• <b>Add 1s across 10</b></li> <li>• <b>Add 10s across a 100</b></li> <li>• <b>Subtract 1s across a 10</b></li> <li>• <b>Subtract 10s across a 100</b></li> <li>• <b>Add two numbers (across a 10)</b></li> <li>• <b>Add two numbers (across a 100)</b></li> <li>• <b>Subtract two numbers (across a 10)</b></li> <li>• <b>Subtract two numbers (across a 100)</b></li> <li>• <b>Complements to 100</b></li> <li>• <b>Add two numbers (no exchange)</b></li> <li>• <b>Subtract two numbers (no exchange)</b></li> <li>• <b>Add two numbers (across a 10)</b></li> <li>• <b>Add two numbers (across a 100)</b></li> <li>• <b>Subtract two numbers (across a 10)</b></li> <li>• <b>Subtract two numbers (across a 100)</b></li> <li>• <b>Add two-digit and 3-digit numbers</b></li> <li>• <b>Subtract a two-digit number from a 3-digit number</b></li> <li>• <b>Inverse operations</b></li> <li>• <b>Make decisions</b></li> </ul> | End of block assessment |
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| Multiplication & Division A<br>4 weeks | <ul style="list-style-type: none"> <li>❖ <b>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</b></li> <li>❖ write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</li> </ul> | <ul style="list-style-type: none"> <li>• Multiplication – equal groups</li> <li>• Use arrays</li> <li>• <b>Multiples of 2</b></li> <li>• <b>Multiples of 5 and 10</b></li> <li>• <b>Sharing &amp; grouping</b></li> <li>• Multiply by 3</li> <li>• Divide by 3</li> <li>• The 3-times table</li> <li>• <b>Multiply by 4</b></li> <li>• <b>Divide by 4</b></li> <li>• <b>The 4x table</b></li> <li>• Multiply by 8</li> <li>• Divide by 8</li> <li>• The 8x table</li> <li>• The 2, 4 and 8x table</li> </ul> | <p><b>3NF-2</b> Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.</p> <p><b>3MD-1</b> Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division</p> | <ul style="list-style-type: none"> <li>• <b>Multiples of 2</b></li> <li>• <b>Multiples of 5 and 10</b></li> <li>• <b>Sharing &amp; grouping</b></li> <li>• <b>Multiply by 4</b></li> <li>• <b>Divide by 4</b></li> <li>• <b>The 4x table</b></li> </ul> <p><b>All 15 steps in this block relate to this criterion</b></p> | End of block assessment |
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