

Year Two



Mullion Primary School

Mathematics Long Term Planning 2024 – 2025

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| | Number and place value |
| | Number facts |
| | Addition and subtraction |
| | Multiplication and division |
| | Geometry |
| | Other |

| Term | Unit name | Unit Source | Strand | Time frame | Small Steps |
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| Autumn 1 | Numbers 10 to 100 | NCETM CP – Unit 1 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-1-numbers-10-to-100/ | | 4 weeks | 1 Pupils explain that one ten is equivalent to ten ones 2 Pupils represent multiples of ten using their numerals 3 Pupils represent multiples of ten using their numerals and names 4 Pupils represent multiples of ten in an expression or an equation 5 Pupils estimate the position of multiples of ten on a 0-100 number line 6 Pupils explain what happens when you add and subtract ten to a multiple of ten 7 Pupils use knowledge of facts and unitising to add and subtract multiples of ten 8 Pupils add and subtract multiples of ten 9 Pupils explore the counting sequence for counting to 100 and beyond 10 Pupils count a large group of objects by counting groups of tens and the extra ones 11 Pupils count a large group of objects by using knowledge of unitising by counting tens and ones 12 Pupils represent a number from 20-99 in different ways 13 Pupils explain and mark the position of numbers 20-99 on a number line 14 Pupils explain that numbers 20-99 can be represented as a length 15 Pupils compare two, two-digit numbers 16 Pupils partition a two-digit number into tens and ones 17 Pupils add two, two-digit numbers by partitioning into tens and one |

Year Two

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| Autumn 1 | Calculations within 20 | NCETM – CP Unit 2 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-2-calculations-within-20/ | | 3 weeks | 1 Pupils add three addends 2 Pupils use a ‘First... Then... Now’ story to add 3 addends 3 Pupils explain that addends can be added in any order 4 Pupils add 3 addends efficiently 5 Pupils add 3 addends efficiently by finding two addends that total 10 6 Pupils add two numbers that bridge through 10 7 Pupils subtract two numbers that bridge through 10 8 Pupils compare numbers and describe how many more or less there are in each set 9 Pupils calculate the difference 10 Pupils use knowledge of subtraction to solve problems in a range of contexts 11 Pupils explain what the difference is between consecutive numbers 12 Pupils calculate difference when information is presented in a pictogram 13 Pupils calculate difference when information is presented in a bar chart |
| Autumn 2 | Fluently add and subtract within 10 | NCETM – CP Unit 3 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-3-fluently-add-and-subtract-within-10/ | | 1 week | 1 Pupils demonstrate their fluency of addition and subtraction within ten 2 Pupils practise addition and subtraction strategies as required |
| Autumn 2 | Addition and subtraction of two-digit numbers | NCETM – CP Unit 4 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-4-addition-and-subtraction-of-two-digit-numbers/ | | 2 weeks | 1 Pupils add and subtract one to and from a two-digit number 2 Pupils add and subtract one to and from a two-digit number that crosses a tens boundary 3 Pupils add and subtract one from any two-digit number 4 Pupils use number facts to add a single-digit number to a two-digit number 5 Pupils use number facts to subtract a single-digit number from a two-digit number |

Year Two

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| | | | | | <p>6 Pupils use a part-part-whole model to represent addition and subtraction</p> <p>7 Pupils use number bonds to ten to add a single-digit number to a two-digit number</p> <p>8 Pupils use number bonds to ten to subtract a single-digit number from a two-digit number</p> <p>9 Pupils use knowledge of 'make ten' to add a one-digit number to a two-digit number</p> <p>10 Pupils use knowledge of 'make ten' to subtract a multiple of ten or a single-digit from a two-digit number</p> <p>11 Pupils solve problems using knowledge of addition and subtraction</p> <p>12 Pupils find ten more or ten less than a two-digit number (1)</p> <p>13 Pupils find ten more or ten less than a two-digit number (2)</p> <p>14 Pupils add and subtract ten to/from a two-digit number</p> <p>15 Pupils explain the patterns when adding and subtracting ten</p> <p>16 Pupils use knowledge of adding and subtracting ten to solve problems</p> <p>17 Pupils use number facts to add a multiple of ten to a two-digit number</p> <p>18 Pupils use number facts to subtract a multiple of ten from a two-digit number</p> <p>19 Pupils partition a two-digit number into parts in different ways (two and three parts)</p> <p>20 Pupils use knowledge of adding and subtracting multiples of ten to solve problems</p> |
| Autumn 2 into Spring 1 | Introduction to multiplication | NCETM – CP Unit 5 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-5-introduction-to-multiplication/ | | 7 weeks | <p>1 Pupils explain that objects can be grouped in different ways</p> <p>2 Pupils describe how objects have been grouped</p> <p>3 Pupils represent equal groups as repeated addition</p> <p>4 Pupils represent equal groups as repeated addition and multiplication</p> <p>5 Pupils represent equal groups as multiplication</p> <p>6 Pupils explain and represent multiplication when a group contains zero or one items</p> <p>7 Pupils identify and explain each part of a multiplication equation</p> |

Year Two

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| | | | | | <p>8 Pupils use knowledge of multiplication to calculate the product</p> <p>9 Pupils represent the two times table in different ways</p> <p>10 Pupils use knowledge of the two times table to solve problems</p> <p>11 Pupils explain the relationship between adjacent multiples of two</p> <p>12 Pupils explain that factor pairs can be written in any order</p> <p>13 Pupils represent counting in tens as the ten times table</p> <p>14 Pupils represent the ten times table in different ways</p> <p>15 Pupils explain the relationship between adjacent multiples of ten</p> <p>16 Pupils represent counting in fives as the five times table</p> <p>17 Pupils represent the five times table in different ways</p> <p>18 Pupils explain the relationship between adjacent multiples of five</p> <p>19 Pupils explain how groups of five and ten are related</p> <p>20 Pupils explain the relationship between multiples of five and ten</p> <p>21 Pupils use knowledge of the relationships between the five and ten times tables to solve problems</p> <p>22 Pupils explain how a factor of zero or one affect the product</p> <p>23 Pupils represent multiplication equations in different ways</p> <p>24 Pupils use knowledge of the two, five and ten times tables to solve problems (1)</p> <p>25 Pupils use knowledge of the two, five and ten times tables to solve problems (2)</p> <p>26 Pupils explain what each factor represents in a multiplication story</p> <p>27 Pupils explain what each factor represents in a multiplication story when one of the factors is one</p> <p>28 Pupils explain how a multiplication equation with two as a factor is related to doubling</p> <p>29 Pupils double two-digit numbers</p> <p>30 Pupils multiply efficiently when one of the factors is two</p> <p>31 Pupils explain how halving and doubling are related</p> <p>32 Pupils explain the relationship between factors and products</p> <p>33 Pupils halve two-digit numbers</p> <p>34 Pupils use knowledge of doubling, halving and the two times table to solve problems</p> |
| Spring 1 | Introduction to division structures | NCETM – CP Unit 6 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-6-introduction-to-division-structures/ | | 2 weeks | <p>1 Pupils explain that objects can be grouped equally</p> <p>2 Pupils identify and explain when objects cannot be grouped equally</p> <p>3 Pupils explain the relationship between division expressions and division stories</p> |

Year Two

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| | | | | | <p>4 Pupils calculate the number of equal groups in a division story</p> <p>5 Pupils use their knowledge of skip counting and division to solve problems relating to measure</p> <p>6 Pupils skip count using the divisor to find the quotient</p> <p>7 Pupils use their knowledge of division to solve problems</p> <p>8 Pupils explain that objects can be shared equally</p> <p>9 Pupils use skip counting to solve a sharing problem</p> <p>10 Pupils skip count using the divisor to find the quotient</p> <p>11 Pupils solve a variety of division problems, explaining their understanding</p> |
| Spring 2 | Shape | <p>White Rose Autumn Shape Unit</p> <p>NCETM guidance: https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-7-shape/ </p> | | 2 weeks | <p>1 Recognise 2D and 3D shapes</p> <p>2 Pupils can count the sides on 2D shapes</p> <p>3 Pupils can count vertices on 2D shapes</p> <p>4 Pupils can draw 2D shapes</p> <p>5 Pupils can recognise lines of symmetry on shapes</p> <p>6 Pupils can use lines of symmetry to complete shapes</p> <p>7 Pupils can sort 2D shapes</p> <p>8 Pupils can count faces on 3D shapes</p> <p>9 Pupils can count edges on 3D shapes</p> <p>10 Pupils can count vertices on 3D shapes</p> <p>11 Pupils can sort 3D shapes</p> <p>12 Pupils can make patterns with 2D and 3D shapes</p> |
| Spring 2 | Addition and subtraction of two-digit numbers | <p>NCETM – CP Unit 8 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-8-addition-and-subtraction-of-two-digit-numbers/ </p> | | 3 weeks | <p>1 Pupils explain strategies used to add</p> <p>2 Pupils add a two-digit number to a two-digit number</p> <p>3 Pupils add a two-digit number to a two-digit number when not crossing ten (i)</p> <p>4 Pupils add a two-digit number to a two-digit number when not crossing ten (ii)</p> |

Year Two

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| | | | | | <p>5 Pupils add a two-digit number to a two-digit number when crossing ten</p> <p>6 Pupils explain strategies used to subtract</p> <p>7 Pupils subtract a two-digit number from a two-digit number</p> <p>8 Pupils partition the subtrahend to help with subtraction</p> <p>9 Pupils subtract a two-digit number from a two-digit number when not crossing ten (i)</p> <p>10 Pupils subtract a two-digit number from a two-digit number when not crossing ten (ii)</p> <p>11 Pupils subtract a two-digit number from a two-digit number when crossing ten</p> <p>12 Pupils subtract efficiently using knowledge of two-digit numbers</p> |
| Summer I | Money | <p>White Rose Spring Money Unit</p> <p>NCETM guidance:</p> <p>https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-9-money/</p> | | 1 week | <p>1 Pupils can count money in pence</p> <p>2 Pupil can count money in pounds, with notes and coins</p> <p>3 Pupils can count money in pounds and pence</p> <p>4 Pupils can choose notes and coins</p> <p>5 Pupils can make the same amount</p> <p>6 Pupils can compare amounts of money</p> <p>7 Pupils can calculate with money</p> <p>8 Pupils can make a pound</p> <p>9 Pupils can find change</p> <p>10 Pupils can solve two-step problems involving money</p> |
| Summer I | Fractions | <p>NCETM – CP Unit 10</p> <p>https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-10-fractions/</p> | | 2 weeks | <p>1 Pupils identify whether something has or has not been split into equal parts</p> <p>2 Pupils name the fraction 'one-half' in relation to a fraction of a length, shape or set of objects</p> <p>3 Pupils name the fraction 'one-quarter' in relation to a fraction of a length, shape or set of objects</p> <p>4 Pupils name the fraction 'one-third' in relation to a fraction of a length, shape or set of objects</p> |

Year Two

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| | | | | | <p>5 Pupils read and write the fraction notation $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ and relate this to a fraction of a length, shape or set of objects</p> <p>6 Pupils find half of numbers</p> <p>7 Pupils find $\frac{1}{3}$ or $\frac{1}{4}$ of a number</p> <p>8 Pupils find $\frac{1}{4}$ and $\frac{3}{4}$ of an object, shape, set of objects, length or quantity</p> <p>9 Pupils recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$</p> |
| Summer 1 | Time | White Rose Summer Time Unit NCETM Guidance: https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-11-time/ | | 1 week | <p>1 Pupils can identify o'clock and half past</p> <p>2 Pupils can identify quarter past and quarter to</p> <p>3 Pupils can tell time past the hour</p> <p>4 Pupils can tell time to the hour</p> <p>5 Pupils can tell the time to 5 minutes</p> <p>6 Pupils can identify minutes in an hour</p> <p>7 Pupils can identify hours in a day</p> |
| Summer 1 | Position and direction | White Rose Summer Position and Direction Unit NCETM Guidance: https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-12-position-and-direction/ | | 1 week | <p>1 Pupils can use the language of position</p> <p>2 Pupils can describe movement</p> <p>3 Pupils can describe turns</p> <p>4 Pupils can describe movement and turns</p> <p>5 Pupils can describe shape patterns with turns</p> |
| Summer 2 | Multiplication and division – doubling, halving, quotitive and partitive division | NCETM – CP Unit 13 https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-13-multiplication-and-division-doubling-halving-quotitive-and-partitive-division/ | | 3 weeks | <p>1 Pupils identify the patterns and relationships between the 5 and 10 times tables</p> <p>2 Pupils explain the patterns and relationships between the 5 and 10 times tables</p> <p>3 Pupils use their knowledge of the 5 and 10 times tables to solve problems</p> <p>4 Pupils identify and explain relationships between the 5 and the 10 times tables</p> <p>5 Pupils use their knowledge of the 5 and 10 times tables to solve problems</p> |

Year Two

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| | | | | | <p>6 Pupils explain how times table facts can help to find the quotient (10 times table)</p> <p>7 Pupils explain how times table facts can help to find the quotient (5 times table)</p> <p>8 Pupils explain how times table facts can help to find the quotient (2 times table)</p> <p>9 Pupils explain how a division equation with 2 as a divisor is related to halving</p> <p>10 Pupils explain each part of a division equation and know how they can be interchanged</p> <p>11 Pupils use knowledge of divisibility rules when the divisor is 2 to solve problems</p> <p>12 Pupils use knowledge of divisibility rules when then divisor is 10 to solve problems</p> <p>13 Pupils use knowledge of divisibility rules when the divisor is 5 to solve problems</p> <p>14 Pupils explain how a dividend of zero affects the quotient</p> <p>15 Pupils explain how the quotient is affected when the divisor is equal to the dividend</p> <p>16 Pupils explain how a divisor of one affects the quotient</p> |
| Summer 2 | Sense of measure – capacity, volume, mass | White Rose Spring Mass, Capacity, Temperature Unit NCETM Guidance: https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-14-sense-of-measure-capacity-volume-mass/ | | 2 weeks | <p>1 Pupils can compare mass</p> <p>2 Pupils can measure in grams</p> <p>3 Pupils can measure in kilograms</p> <p>4 Pupils can use four operations when calculating with mass</p> <p>5 Pupils can compare volume and capacity</p> <p>6 Pupils can measure in millilitres</p> <p>7 Pupils can measure in litres</p> <p>8 Pupils can use four operations when calculating with volume and capacity</p> <p>9 Pupils can calculate with temperature</p> |

Year Two

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| | | | | | <p>Cross-curricular opportunities to address this topic</p> <ul style="list-style-type: none">• Science - when working scientifically, children should be encouraged to estimate and make measurements in order to observe the world around them and to ensure when investigating, that tests are fair.• Geography - identifying seasonal and daily weather patterns and identifying features of places could include opportunities to measure.• Design Technology - measure ingredients for a recipe and consider the temperatures of storing and cooking the food. Measure materials for projects involving cutting and measuring in a variety of contexts.• Create a role-play post office or visit a real one - measuring the length of and finding the mass of parcels and letters.• Create a role-play shop or visit a real one - looking carefully at measures on packaging. |
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Assessment questions, linked to the DFE's Ready-to-Progress Criteria:

<https://www.ncetm.org.uk/classroom-resources/cp-year-2-curriculum-map/>