

Year Three



Mullion Primary School

Mathematics Long Term Planning 2024 – 2025

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

Term	Unit name	Unit Source	Strand	Time frame	Small Steps
Autumn 1	Adding and subtracting across 10	NCETM CP – Unit 1 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-1-adding-and-subtracting-across-10/		2 weeks	1 Pupils add 3 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
Autumn 1 into Autumn 2	Numbers to 1,000	NCETM – CP Unit 2 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-2-numbers-to-1-000/		10 weeks	1 Pupils explain that 100 is composed of ten tens and one hundred ones 2 Pupils explain that 100 is composed of 50s 25s and 20s 3 Pupils use known facts to find multiples of ten that compose 100 4 Pupils will use known facts to find a two-digit number and a one- or two-digit number that compose 100 5 Pupils use known facts to find correct complements to 100 6 Pupils use known facts to find complements to 100 accurately and efficiently 7 Pupils represent a three-digit number which is a multiple of ten using their numerals and names 8 Pupils use place value knowledge to write addition and subtraction equations 9 Pupils bridge 100 by adding or subtracting in multiples of ten 10 Pupils use knowledge of addition and subtraction of multiples of ten bridging the hundreds boundary to solve problems 11 Pupils count across and on from 100 12 Pupils represent a three-digit number up to 199 in different ways 13 Pupils bridge 100 by adding or subtracting a single-digit number 14 Pupils find ten more or ten less than a given number 15 Pupils cross the hundreds boundary when adding and subtracting any two-digit multiple of ten 16 Pupils become familiar with a metre ruler (marked and unmarked intervals, 1 x 1m, 10 x 10cm, 100 x 1cm) 17 Pupils measure length and height from zero using whole metres and cm 18 Pupils measure length and height from zero using cm 19 Pupils convert between m and cm (include whole m to cm, cm to whole m and cm and vice versa)

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					20 Pupils become familiar with a ruler in relation to cm and mm (marked and unmarked intervals, knowing 1cm = 10mm) 21 Pupils measure length from zero using mm / whole cm and mm 22 Pupils convert between cm and mm (include whole cm to mm, mm to whole cm and mm and vice versa) 23 Pupils estimate a length/height, measure a length/height and record in a table 24 Pupils use knowledge of place value to represent a three-digit number in different ways 25 Pupils represent a three-digit number up to 1000 in different ways 26 Pupils use knowledge of the additive relationship to solve problems 27 Pupils count in hundreds and tens on a number line 28 Pupils identify the previous, next and nearest multiple of 100 on a number line for a three-digit multiples of ten 29 Pupils position three-digit numbers on number lines 30 Pupils estimate the position of three-digit numbers on unmarked number lines 31 Pupils compare one-, two- and three-digit numbers 32 Pupils compare two three-digit numbers 33 Pupils order sets of three-digit numbers 34 Pupils use known facts to add or subtract multiples of 100 within 1000 35 Pupils write a three-digit multiple of 10 as a multiplication equation 36 Pupils partition three-digit numbers in different ways 37 Pupils use known facts to solve problems involving partitioning numbers 38 Pupils use known facts to add or subtract to/from multiples of 100 in tens 39 Pupils use known facts to add or subtract to/from multiples of 100 in ones 40 Pupils add/subtract multiples of ten bridging 100 41 Pupils add/subtract to/from a three-digit number in ones bridging 100 42 Pupils find 10 more or less across any hundreds boundary 43 Pupils use knowledge of adding or subtracting to/from three-digit numbers to solve problems 44 Pupils count forwards and backwards in multiples of 2, 20, 5, 50 and 25 45 Pupils use knowledge of counting in multiples of 2, 20, 5, 50 and 25 to solve problems 46 Pupils become familiar with different weighing scales up to 1kg (intervals of 100g, 200g, 250g and 500g) 47 Pupils become familiar with the tools to measure volume and capacity up to 1 litre (intervals of 100ml, 200ml, 250ml and 500ml) 48 Pupils measure mass from zero up to 1kg using grams 49 Pupils measure mass from zero above 1kg using whole kg and grams 50 Pupils measure volume from zero up to 1 litre using ml
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					51 Pupils measure volume from zero above 1 litre using whole litres and ml 52 Pupils estimate mass in grams and volume in ml 53 Pupils estimate a mass/volume, measure a mass/volume and record in a table
Autumn 2	Right angles	White Rose Summer Term Shape Unit (follow WR small steps, but NCETM further steps (see below) included to be taught) https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-3-right-angles/		2 weeks	1 Pupils recognise turns and angles 2 Pupils understand right angles (<i>to include NCETM small steps:</i>) • Pupils learn that a right angle is a 'square corner' and identify them in the environment • Pupils learn that a rectangle is a 4-sided polygon with four right angles • Pupils learn that a square is a rectangle in which the four sides are equal length • Pupils cut rectangles and squares on the diagonal and investigate the shapes they make • Pupils join four right angles at a point using different right-angled polygons • Pupils investigate and draw other polygons with right angles 3 Pupils can compare angles
Autumn 2	Manipulating the additive relationship and securing mental calculation	NCETM – CP Unit 4 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-4-manipulating-the-additive-relationship-and-securing-mental-calculation/		4 weeks	1 Pupils add two 3-digit numbers using partitioning 2 Pupils add two 3-digit numbers using adjusting 3 Pupils add a pair of 2- or 3-digit numbers using redistribution 4 Pupils subtract a pair of 2- or 3-digit numbers, bridging a multiple of 10, using partitioning 5 Pupils subtract a pair of 2-digit numbers, crossing a ten or hundreds boundary, by finding the difference between them 6 Pupils subtract a pair of three-digit multiples of 10 within 1000 by finding the difference between them 7 Pupils evaluate the efficiency of strategies for subtracting from a 3-digit number 8 Pupils explain why the order of addition and subtraction steps in a multi-step problem can be chosen 9 Pupils accurately and efficiently solve multi-step addition and subtraction problems 10 Pupils understand and can explain that both addition and subtraction equations can be used to describe the same additive relationship (2-digit numbers)

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					11 Pupils understand and can explain that both addition and subtraction equations can be used to describe the same additive relationship (3-digit numbers) 12 Pupils use knowledge of the additive relationship to rearrange equations 13 Pupils use knowledge of the additive relationship to identify what is known and what is unknown in an equation 14 Pupils use knowledge of the additive relationship to rearrange equations before solving
Autumn 2 into Spring 1	Column addition	NCETM – CP Unit 5 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-5-column-addition/		2 weeks	1 Pupils identify the addends and the sum in column addition 2 Pupils use their knowledge of place value to correctly lay out column addition 3 Pupils add a pair of 2-digit numbers using column addition 4 Pupils add using column addition 5 Pupils use their knowledge of column addition to solve problems 6 Pupils add a pair of 2-digit numbers using column addition with regrouping in the ones column 7 Pupils add a pair of 2-digit numbers using column addition with regrouping in the tens column 8 Pupils add using column addition with regrouping 9 Pupils use known facts and strategies to accurately and efficiently calculate and check column addition 10 Pupils use their knowledge of column addition to solve problems
Spring 1	2, 4 and 8 times tables	NCETM – CP Unit 6 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-6-2-4-8-times-tables/		3 weeks	1 Pupils represent counting in fours as the 4 times table 2 Pupils use knowledge of the 4 times table to solve problems 3 Pupils explain the relationship between adjacent multiples of four 4 Pupils explain the relationship between multiples of 2 and multiples of 4 5 Pupils use knowledge of the relationships between the 2 and 4 times tables to solve problems 6 Pupils represent counting in eights as the 8 times table 7 Pupils explain the relationship between adjacent multiples of eight 8 Pupils explain the relationship between multiples of 4 and multiples of 8 9 Pupils use knowledge of the relationships between the 4 and 8 times tables to solve problems 10 Pupils explain the relationship between multiples of 2, 4 and multiples of 8

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					11 Pupils use knowledge of the relationships between the 2, 4 and 8 times tables to solve problems 12 Pupils use knowledge of the divisibility rules for divisors of 2 and 4 to solve problems 13 Pupils use knowledge of the divisibility rules for divisors of 8 to solve problems 14 Pupils scale known multiplication facts by 10 15 Pupils scale division derived from multiplication facts by 10
Spring 2	Column subtraction	NCETM – CP Unit 7 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-7-column-subtraction/		1 week	1 Pupils identify the minuend and the subtrahend in column subtraction 2 Pupils explain the column subtraction algorithm 3 Pupils subtract from a 2-digit number using column subtraction with exchanging from tens to ones 4 Pupils subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens (1) 5 Pupils subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens (2) 6 Pupils evaluate the efficiency of strategies for subtraction
Spring 2 into Summer 1	Unit fractions	NCETM – CP Unit 8 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-8-unit-fractions/		5 weeks	1 Pupils identify a whole and the parts that make it up 2 Pupils explain why a part can only be defined when in relation to a whole 3 Pupils identify the number of equal or unequal parts in a whole 4 Pupils identify equal parts when they do not look the same (i) 5 Pupils explain the size of the part in relation to the whole 6 Pupils construct a whole when given a part and the number of parts 7 Pupils identify how many equal parts a whole has been divided into 8 Pupils use fraction notation to describe an equal part of the whole 9 Pupils represent a unit fractions in different ways 10 Pupils identify parts and wholes in different contexts (i) 11 Pupils identify parts and wholes in different contexts (ii) 12 Pupils identify equal parts when they do not look the same (ii) 13 Pupils compare and order unit fractions by looking at the denominator 14 Pupils identify when unit fractions cannot be compared 15 Pupils construct a whole when given one part and the fraction that it represents 16 Pupils use knowledge of the relationship between parts and wholes in unit fractions to solve problems

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					17 Pupils identify the whole, the number of equal parts and the size of each part as a unit fraction 18 Pupils quantify the number of items in each part and connect to the unit fraction operator 19 Pupils calculate the value of a part by using knowledge of division and division facts 20 Pupils calculate the value of a part by connecting knowledge of division and division facts with finding a fraction of a quantity 21 Pupils find fractions of quantities using knowledge of division facts with increasing fluency
Summer I	Non-unit fractions	NCETM – CP Unit 9 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-9-non-unit-fractions/		4 weeks	1 Pupils explain that non-unit fractions are composed of more than one unit fraction 2 Pupils identify non-unit fractions 3 Pupils identify the number of equal or unequal parts in a whole 4 Pupils use knowledge of non-unit fractions to solve problems 5 Pupils use knowledge of unit fractions to find one whole 6 Pupils place fractions between 0 and 1 on a number line 7 Pupils use repeated addition of a unit fraction to form a non-unit fraction 8 Pupils use repeated addition of a unit fraction to form 1 9 Pupils compare using knowledge of non-unit fractions equivalent to one 10 Pupils compare non-unit fractions with the same denominator 11 Pupils compare unit fractions 12 Pupils compare fractions with the same numerator 13 Pupils add up fractions with the same denominator 14 Pupils add on fractions with the same denominator 15 Pupils add fractions with the same denominator using a generalised rule 16 Pupils subtract fractions with the same denominator 17 Pupils identify the whole, the number of equal parts and the size of each part as a unit fraction 18 Pupils explain that addition and subtraction of fractions are inverse operations 19 Pupils subtract fractions from a whole by converting the whole to a fraction 20 Pupils represent a whole as a fraction in different ways and use this to solve problems involving subtraction

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Summer 2	Parallel and perpendicular lines in polygons and 3D shape	- White Rose Summer Term Shape Unit – second part, right angles covered in Autumn (follow WR small steps, but NCETM further steps (see below) included to be taught) - NCETM guidance https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-10-parallel-and-perpendicular-sides-in-polygons/		2 weeks	White Rose small steps: 1 Pupils can measure and draw accurately 2 Pupils recognise parallel and perpendicular <i>(to include NCETM small steps):</i> - Pupils learn to extend lines and sides to identify parallel and perpendicular lines 3 Pupils can recognise and describe 2D shapes <i>(to include NCETM small steps):</i> - Pupils make compound shapes by joining two polygons in different ways (same parts, different whole) - Pupils investigate different ways of composing and decomposing a polygon (same whole, different parts) 4 Pupils can draw polygons <i>(to include NCETM small steps):</i> - Pupils draw polygons on isometric paper - Pupils use geostrips to investigate quadrilaterals with and without parallel and perpendicular sides - Pupils make and draw compound shapes with and without parallel and perpendicular sides - Pupils make and draw triangles on circular geoboards - Pupils make and draw quadrilaterals on circular geoboards - Pupils draw shapes with given properties on a range of geometric grids 5 Pupils can recognise 3D shapes 6 Pupils can make 3D shapes
Summer 2	Time	- White Rose Summer Time Unit - NCETM Guidance: https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-11-time/		1 week	1 Pupils can write and recognise Roman Numerals to 12 2 Pupils can tell the time to 5 minutes 3 Pupils can tell the time to the minute 4 Pupils can read the time on a digital clock 5 Pupils can use a.m and p.m 6 Pupils know years, months and days 7 Pupils can recognise days and hours 8 Pupils can recognise hours and minutes, using start and end times

Assessment questions, linked to the DfE's Ready-to-Progress Criteria: <https://www.ncetm.org.uk/classroom-resources/cp-year-3-curriculum-map/>