Year 3 Maths Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Autumn	**Unit 1** Adding and subtracting within 10		**Unit 2** Place value / Numbers up to 1,000 (Includes length, mass, capacity and volume)				**Unit 2** Place value / Numbers up to 1,000 (Includes length, mass, capacity and volume)						
Spring	**Unit 3** Right angles		**Unit 4** Manipulating the additive relationship and securing mental calculation				**Unit 5** Column addition		**Unit 6** 2, 4 and 8 times tables				
Summer	**Unit 7** Column subtraction	**Unit 8** Unit Fractions					**Unit 9** Non unit fractions				**Unit 10** Parallel and perpendicular sides in polygons		**Unit 11** Time

Number	Measurement	Geometry	Statistics

Statistics taught throughout the curriculum and through cross curricular links.

Time is also covered during Fluent in Five

Year 3 Maths Curriculum 2023-24

Year 3 maths curriculum map 2023-24

COVID Recovery Curriculum
NCETM prioritisation curriculum/ NCETM spines/ White Rose SOL/ DFE Ready to Progress criteria have all been used to support the planning, teaching and learning of mathematics.

Rough suggestions are given for the intended length of each unit, but teachers are expected to adjust according to the needs and prior learning of their pupils.

Unit	Unit name	Learning outcomes/ small steps	Links with other resources
1 (2 weeks)	**Adding and subtracting across 10** **NCETM prioritisation unit 1**	**(NCETM - unit 1)** 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 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-1-adding-and-subtracting-across-10/	2AS–1 Add and subtract across 10. 3NF–1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice. 1.11 Addition and subtraction: bridging 10 White rose – Addition and subtraction unit
2 (10 weeks)	**Place Value/ Numbers to 1,000** **NCETM prioritisation unit 2** **White Rose** Length, mass and capacity are included within this unit.	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	• 3NPV–1 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. • 3NPV–2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning. • 3NPV–3 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. • 1.18 Composition and calculation: three-digit numbers

		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)	
		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	
		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	
		https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-2-numbers-to-1-000/	
3 (2 weeks)	**Right Angles** **NCETM prioritisation unit 3**	1) Pupils rotate two lines around a fixed point to make different sized angles	White Rose – shape unit
		2) Pupils draw triangles and quadrilaterals and identify vertices	
		3) Pupils learn that a right angle is a 'square corner' and identify them in the environment	
		4) Pupils learn that a rectangle is a 4-sided polygon with four right angles	
		5) Pupils learn that a square is a rectangle in which the four sides are equal length	
		6) Pupils cut rectangles and squares on the diagonal and investigate the shapes they make	
		7) Pupils join four right angles at a point using different right-angled polygons	
		8) Pupils investigate and draw other polygons with right angles	
		https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-3-right-angles/	

4 (4 weeks)	**Manipulating the additive relationship and securing mental calculation** **NCETM prioritisation unit 4**	**Manipulating the additive relationship and securing mental calculation** 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) 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 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-4-manipulating-the-additive-relationship-and-securing-mental-calculation/	3AS–3 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. 1.19 Securing mental strategies: calculation up to 999 White Rose – Addition and subtraction unit
5 (2 weeks)	**Column addition** **NCETM prioritisation unit 5**	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 https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-5-column-addition/	3AS–2 Add and subtract up to three-digit numbers using columnar methods. 1.20 Algorithms: column addition White Rose – Addition and subtraction unit

| 6
(3 weeks) | **2, 4, 8 times tables**

NCETM prioritisation unit 6

White Rose
(Do not teach the remaining White Rose units) | 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
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
https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-6-2-4-8-times-tables/ | 3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.
3NF–2 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.
3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).
2.7 Times tables: 2, 4 and 8, and the relationship between them
White Rose – Multiplication and division A unit
White Rose – Multiplication and division B unit |
| 7
(1 week) | **Column subtraction**

NCETM prioritisation unit 7 | 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
https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-7-column-subtraction/ | 3AS–2 Add and subtract up to three-digit numbers using columnar methods.
1.21 Algorithms: column subtraction
White Rose – Addition and subtraction unit |

| 8
(5 weeks) | **Unit Fractions**

NCETM prioritisation unit 8 | **Unit fractions**
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
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
https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-8-unit-fractions/ | 3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.
3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency).
3F–3 Reason about the location of any fraction within 1 in the linear number system.
3.1 Preparing for fractions: the part–whole relationship
3.2 Unit fractions: identifying, representing and comparing
White Rose – Fractions unit |
| 9
(4 weeks) | **Non Unit Fractions**

NCETM prioritisation unit 9 | **Non unit fractions**
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 numberline
7) Pupils use repeated addition of a unit fraction to form a non-unit fraction | 3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.
3F–3 Reason about the location of any fraction within 1 in the linear number system.
3F–4 Add and subtract fractions with the same denominator, within 1.
3.3 Non-unit fractions: identifying, representing and comparing
3.4 Adding and subtracting within one whole
White Rose – Fractions unit |

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		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	
		https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-9-non-unit-fractions/	
10 (2 weeks)	**Geometry - Properties of shape** **NCETM prioritisation unit 10 White Rose**	1) Pupils make compound shapes by joining two polygons in different ways (same parts, different whole) 2) Pupils investigate different ways of composing and decomposing a polygon (same whole, different parts) 3) Pupils draw polygons on isometric paper 4) Pupils use geostrips to investigate quadrilaterals with and without parallel and perpendicular sides 5) Pupils make and draw compound shapes with and without parallel and perpendicular sides 6) Pupils learn to extend lines and sides to identify parallel and perpendicular lines 7) Pupils make and draw triangles on circular geoboards 8) Pupils make and draw quadrilaterals on circular geoboards 9) Pupils draw shapes with given properties on a range of geometric grids https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-10-parallel-and-perpendicular-sides-in-polygons/	3G–1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. 3G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides. White Rose – Properties of shape
11 (1 weeks)	**Time** **White Rose** **(Please see notes on NCETM prioritisation curriculum).**	1) Roman numerals to 12 2) Tell the time to 5 minutes 3) Tell the time to the minute 4) Read time on a digital clock 5) Use am and pm 6) Years, months and days 7) Days and hours	White Rose – Time unit

		8) Hours and minutes – use start and end times9) Hours and minutes - use durations 10) Minutes and seconds 11) Units of time 12) Solve problems with time This is covered throughout the school day on a regular basis too. https://www.ncetm.org.uk/classroom-resources/cp-year-3-unit-11-time/	

Dark grey references are ready-to-progress criteria from the DfE Guidance 2020

Light grey references are from the NCETM Primary Mastery Professional Development materials

Blue references are White Rose materials