

Year 2 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 Numbers 10 to 100				Unit 2 Calculations within 20		Unit 2	Unit 3 Fluently add and subtract within 10	Unit 4 Addition and subtraction of two-digit numbers (1)	Unit 5 Introduction to multiplication			
Spring	Unit 5 Introduction to multiplication				Unit 6 Introduction to division	Unit 6 Introduction to division	Unit 7 Shape		Unit 8 Addition and subtraction of two-digit numbers (2)	Unit 9 Money			
Summer	Unit 9 Money	Unit 10 Fraction		Unit 11 Time		Unit 12 Position and direction	Unit 12 Position and direction	Unit 13 Multiplication and division – doubling and halving		Unit 14 Mass, capacity and temperature		Consolidation	

Statistics taught throughout the curriculum and cross curricular

Number	Measurement	Geometry	Statistics
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Year 2 maths curriculum map 2021-22

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	Links with other resources
1 (4 weeks)	Numbers 10 to 100 NCETM prioritisation unit 1	<ol style="list-style-type: none"> 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 to partition two-digit numbers and use this to write addition and subtraction calculations. 	<p>2NPV-1 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>2NPV-2 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>1.8 Composition of numbers: multiples of 10 up to 100</p> <p>1.9 Composition of numbers: 20-100</p> <p>White Rose – place value</p>
2 (3 weeks)	Calculations within 20 NCETM prioritisation unit 2	<ol style="list-style-type: none"> 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 	<p>2AS-1 Add and subtract across 10.</p> <p>2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?".</p> <p>1.11 Addition and subtraction: bridging 10</p> <p>1.12 Subtraction as difference</p> <p>White Rose – addition and subtraction</p>



		12) Pupils calculate difference when information is presented in a pictogram 13) Pupils calculate difference when information is presented in a bar chart	
3 (1 week)	Fluently add and subtract within 10 NCETM prioritisation unit 3	1) Pupils demonstrate their fluency of addition and subtraction within ten 2) Pupils practise addition and subtraction strategies as required	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. 1.7 Addition and subtraction: strategies within 10
4 (2 weeks)	Addition and subtraction of two-digit numbers (1) NCETM prioritisation unit 4	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 6) Pupils use a part-part-whole model to represent addition and subtraction 7) Pupils use number bonds to ten to add a single-digit number to a two-digit number 8) Pupils use number bonds to ten to subtract a single-digit number from a two-digit number 9) Pupils use knowledge of 'make ten' to add a one-digit number to a two-digit number 10) Pupils use knowledge of 'make ten' to subtract a multiple of ten or a single-digit from a two-digit number 11) Pupils solve problems using knowledge of addition and subtraction 12) Pupils find ten more or ten less than a two-digit number (1) 13) Pupils find ten more or ten less than a two-digit number (2) 14) Pupils add and subtract ten to/from a two-digit number 15) Pupils explain the patterns when adding and subtracting ten 16) Pupils use knowledge of adding and subtracting ten to solve problems 17) Pupils use number facts to add a multiple of ten to a two-digit number 18) Pupils use number facts to subtract a multiple of ten from a two-digit number 19) Pupils partition a two-digit number into parts in different ways (two and three parts) 20) Pupils use knowledge of adding and subtracting multiples of ten to solve problems	2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. 1.13 Addition and subtraction: two-digit and single-digit numbers 1.14 Addition and subtraction: two-digit numbers and multiples of ten White Rose – addition and subtraction
5 (7 weeks)	Introduction to multiplication NCETM prioritisation unit 5	1) Pupils explain that objects can be grouped in different ways 2) Pupils describe how objects have been grouped 3) Pupils represent equal groups as repeated addition 4) Pupils represent equal groups as repeated addition and multiplication 5) Pupils represent equal groups as multiplication 6) Pupils explain and represent multiplication when a group contains zero or one items 7) Pupils identify and explain each part of a multiplication equation 8) Pupils use knowledge of multiplication to calculate the product 9) Pupils represent the two times table in different ways 10) Pupils use knowledge of the two times table to solve problems 11) Pupils explain the relationship between adjacent multiples of two 12) Pupils explain that factor pairs can be written in any order 13) Pupils represent counting in tens as the ten times table 14) Pupils represent the ten times table in different ways 15) Pupils explain the relationship between adjacent multiples of ten	2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. 2.2 Structures: multiplication representing equal groups 2.3 Times tables: groups of 2 and commutativity (part 1) 2.4 Times tables: groups of 10 and of 5, and factors of 0 and 1 2.5 Commutativity (part 2), doubling and halving White Rose – multiplication



		<ul style="list-style-type: none"> 16) Pupils represent counting in fives as the five times table 17) Pupils represent the five times table in different ways 18) Pupils explain the relationship between adjacent multiples of five 19) Pupils explain how groups of five and ten are related 20) Pupils explain the relationship between multiples of five and ten 21) Pupils use knowledge of the relationships between the five and ten times tables to solve problems 22) Pupils explain how a factor of zero or one affect the product 23) Pupils represent multiplication equations in different ways 24) Pupils use knowledge of the two, five and ten times tables to solve problems (1) 25) Pupils use knowledge of the two, five and ten times tables to solve problems (2) 26) Pupils explain what each factor represents in a multiplication story 27) Pupils explain what each factor represents in a multiplication story when one of the factors is one 28) Pupils explain how a multiplication equation with two as a factor is related to doubling 29) Pupils double two-digit numbers 30) Pupils multiply efficiently when one of the factors is two 31) Pupils explain how halving and doubling are related 32) Pupils explain the relationship between factors and products 33) Pupils halve two-digit numbers 34) Pupils use knowledge of doubling, halving and the two times table to solve problems 	
6 (2 weeks)	Introduction to division structures NCETM prioritisation unit 6	<ul style="list-style-type: none"> 1) Pupils explain that objects can be grouped equally 2) Pupils identify and explain when objects cannot be grouped equally 3) Pupils explain the relationship between division expressions and division stories 4) Pupils calculate the number of equal groups in a division story 5) Pupils use their knowledge of skip counting and division to solve problems relating to measure 6) Pupils skip count using the divisor to find the quotient 7) Pupils use their knowledge of division to solve problems 8) Pupils explain that objects can be shared equally 9) Pupils use skip counting to solve a sharing problem 10) Pupils skip count using the divisor to find the quotient 11) Pupils solve a variety of division problems, explaining their understanding 	<p>2MD–2 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>2.6 Structures: quotitive and partitive division</p> <p>White Rose – division</p>
7 (2 weeks)	Shape NCETM prioritisation unit 7	<ul style="list-style-type: none"> 1) Pupils learn that a polygon is a 2D shape with straight sides that meet at vertices 2) Pupils describe polygons and find different ways to sort them 3) Pupils learn that polygons can be sorted and named according to the number of sides and vertices 4) Pupils discuss, and compare by direct comparison, the shape and size of polygons 5) Pupils discuss, and compare by direct comparison, the vertices of polygons 6) Pupils investigate how polygons can be joined and folded to form 3-dimensional shapes 7) Pupils describe 3-dimensional shapes and find different ways to sort them 8) Pupils discuss, and compare by direct comparison, the shape and size of 3-dimensional shapes 	<p>2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties</p> <p>White Rose – shape</p>
8 (2 weeks)	Addition and subtraction of two-digit numbers NCETM prioritisation unit 8	<ul style="list-style-type: none"> 1) Pupils explain strategies used to add 2) Pupils add a two-digit number to a two-digit number 3) Pupils add a two-digit number to a two-digit number when not crossing ten (i) 4) Pupils add a two-digit number to a two-digit number when not crossing ten (ii) 5) Pupils add a two-digit number to a two-digit number when crossing ten 	<p>2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.</p> <p>1.15 Addition: two-digit and two-digit</p>



		6) Pupils explain strategies used to subtract 7) Pupils subtract a two-digit number from a two-digit number 8) Pupils partition the subtrahend to help with subtraction 9) Pupils subtract a two-digit number from a two-digit number when not crossing ten (i) 10) Pupils subtract a two-digit number from a two-digit number when not crossing ten (ii) 11) Pupils subtract a two-digit number from a two-digit number when crossing ten 12) Pupils subtract efficiently using knowledge of two-digit numbers	numbers 1.16 Subtraction: two-digit and two-digit numbers White Rose – addition and subtraction
9 (2 weeks)	Money NCETM prioritisation unit 9	1) Pupils will recognise and know the value of different denominations of coins. (Recognising coins) 2) Pupils are able to identify and recognise notes. (Recognise notes) 3) Pupils will be introduced to the £ and p symbol. They will count in 1p, 2p, 5p, 10p and 20p coins. (Count money – pence) 4) Pupils will count in £1, £2, £5, £10 and £20. (Count money – pounds) 5) Pupils will count pound and pence together. (Count money – Notes and coins) 6) Pupils select coins to make an amount. (Select money) 7) Pupils will explore the different ways of making the same amount. (Make the same amount) 8) Pupils will compare two different values in either pounds or pence. (Compare money) 9) Pupils will build on their knowledge of addition to add money. (Find the total) 10) Pupils will expand their knowledge of addition and subtraction strategies by finding the difference between two amounts. (Find the difference) 11) Pupils will build on their subtraction skills by finding change from a given amount. (Find change) 12) Children will solve two step word problems involving money.	White Rose – money
10 (2 weeks)	Fraction NCETM prioritisation unit 10	1) Pupils identify whether something has or has not been split into equal parts 2) Pupils name the fraction 'one-half' in relation to a fraction of a length, shape or set of objects 3) Pupils name the fraction 'one-quarter' in relation to a fraction of a length, shape or set of objects 4) Pupils name the fraction 'one-third' in relation to a fraction of a length, shape or set of objects 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 6) Pupils find half of numbers 7) Pupils find $\frac{1}{3}$ or $\frac{1}{4}$ of a number 8) Pupils find $\frac{1}{4}$ and $\frac{3}{4}$ of an object, shape, set of objects, length or quantity 9) Pupils recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	3.0 Guidance on the teaching of fractions in Key Stage 1 White Rose – fraction
11 (2 weeks)	Time White Rose	1) Pupils are introduced to telling the time to the hour using an analogue clock. They learn the language of o'clock and understand the hour hand is the shorter hand and the minute hand is the longer hand. (Telling time to the hour) 2) Pupils are introduced to telling the time to the half hour. They learn the language half past. (Telling time to the half hour) 3) Pupils create times using individual clocks with moveable hands. Pupils will read and write times from clocks. (O'clock and half past) 4) Pupils read and draw the times 'quarter to' and 'quarter past'. They use their knowledge of fractions and turns to identify quarter past and quarter to. (Quarter past and quarter to) 5) Pupils read and show analogue time to 5-minute intervals. (Telling time to 5 minutes) 6) Pupils explore the difference between seconds, minutes and hours. They decide which activities would be measured in each unit of time. (Writing time) 7) Pupils learn that there are 24 hours in a day and 60 minutes in an hour.	White Rose – time



		<p>Pupils use clocks to convert minutes to hours and minutes. (Hours and days)</p> <p>8) Pupils identify the start and end time of an event. They use these times to work out how long an event lasted. (Find durations of time)</p> <p>9) Pupils compare times using 'longer' and 'shorter'. They order times from longest to shortest and vice versa. (Compare durations of time)</p>	
12 (2 weeks)	<p>Position and Direction</p> <p>White Rose</p>	<p>1) Pupils use 'left', 'right', 'forwards' and 'backwards' to describe position and direction. (Describe position)</p> <p>2) Pupils will build upon directional language 'left' and 'right' to assist with describing position. They will describe position using: 'top', 'in between', 'bottom', 'above' and 'below'. (Describe position)</p> <p>3) Pupils use language 'forwards', 'backwards', 'up', 'down', 'left' and 'right' to describe movement in a straight line. (Describe movement)</p> <p>4) Pupils describe turns using the language 'full turn', 'half turn', 'quarter turn', 'three-quarter turn', 'clockwise' and 'anticlockwise'. (Describe turns)</p> <p>5) Pupils use their knowledge of movement and turns to describe and record directions. (Describe movement and turns)</p> <p>6) Pupils describe and create patterns that involve direction and turns, using the language 'clockwise', 'anticlockwise', 'quarter', 'half' and 'three quarters' to describe patterns. (Making patterns with shapes)</p>	<p>White Rose – position and direction</p>
13 (2 weeks)	<p>Multiplication and division – doubling, halving, quotitive and partitive division</p> <p>NCETM prioritisation unit 13</p>	<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> <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>	<p>2.5 Commutativity (part 2), doubling and halving</p> <p>2.6 Structures: quotitive and partitive division</p> <p>White Rose – multiplication and division</p>
14 (3 weeks)	<p>Mass, capacity and temperature</p> <p>White Rose</p>	<p>1) Pupils begin by holding objects and describing them using vocabulary such as heavy, light, heavier than, lighter than before using the scales to check. (Introduce weight and mass)</p> <p>2) Pupils use a variety of non-standard units (e.g. cubes, bricks) to measure the mass of an object. (Measure mass)</p> <p>3) Pupils compare mass using < and > and order objects based on their masses. (Compare mass)</p> <p>4) Pupils use standard units of mass (grams). Pupils apply their counting in 2s, 5s and 10s skills to reading scales accurately. They should see a variety of scales with different intervals. (Measure mass in grams)</p> <p>5) Pupils use their knowledge of measuring mass in grams to start to measure mass in kilograms. They apply counting in 2s, 5s and 10s to measure on different scales. (Measure mass in kilograms)</p> <p>6) Pupils compare the volume in a container by describing whether it is full, nearly full, empty or nearly empty. (Introduce capacity and volume)</p> <p>7) Pupils measure the capacity of different containers using non-standard units of measure. (Measure</p>	<p>White Rose – mass, capacity and temperature</p>



		<p>capacity)</p> <p>8) Pupils compare the volume of containers using $<$, $>$ and $=$. Pupils use the language 'quarter', 'half' and 'three-quarters full' to describe and compare volume. (Compare volume)</p> <p>9) Pupils use a selection of different measuring cylinders and jugs in order to practice measuring in millilitres. (Millilitres)</p> <p>10) Pupils recognise the difference between measuring in millilitres and litres and when it is more efficient to use litres to measure liquid rather than millilitres. (Litres)</p> <p>11) Pupils are introduced to temperature, thermometers and the units 'degrees Centigrade' , written $^{\circ}\text{C}$. They apply their counting in 2s, 5s and 10s skills when reading different scales on thermometers. (Temperature)</p>	
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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

