Northcote Primary School - Long term Maths Plan for Year 2 – 2021 - 2022

This yearly overview gives a coverage guide – changes will be made to ensure children are understanding learning and being challenged. Reasoning is woven into learning throughout the week.

Year 2, Autumn Term 1

Wk	Strands	Progression Focus	Weekly Summary
1 / 2	**NPV** Number and place value; **PRA** Problem solving, reasoning and algebra	**Place value** Week 1 focuses on place value in numbers 0–100 and different ways of representing, comparing and ordering these.	Read and write numbers up to 100, Estimate and count a number of objects up to 100; locate numbers on 0−100 beaded lines and 1−100 squares; compare pairs of numbers; order three numbers, order 2-digit numbers, use < > and =, begin to partition 2 digit numbers
3	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction** Weeks 2 and 3 focus on learning and using addition and subtraction number facts, including bonds to 10, in simple and harder calculations.	Revise number bonds to 6, 7, 8, 9 and 10; know number bonds to 10 and begin to learn related subtraction facts; know multiple of 10 number bonds to 100, learn bonds to 20
4	**MMD** Mental multiplication and division; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction** Weeks 2 and 3 focus on learning and using addition and subtraction number facts, including bonds to 10, in simple and harder calculations.	Double numbers to double 15, begin to double 2-digit numbers
5	**GPS** Geometry: properties of shapes; **STA** Statistics	**2D shapes** Week 4 focuses on identifying and classifying 2D shapes, using a variety of sorting devices.	Half numbers less than 30, begin to half 2 digit numbers. Sort 2D shapes according to symmetry properties using Venn diagrams, identify right angles and sort shapes using Venn diagrams, recognise squares, rectangles, circles, triangles, ovals and hexagons
6	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction** Weeks 2 and 3 focus on learning and using addition and subtraction number facts, including bonds to 10, in simple and harder calculations.	Add and subtract single digits to a two digit number. Solve problem and reasoning questions
7	**NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction	**Place value; ordinal numbers** Weeks 5 and 6 focus on developing a good understanding of place value, comparing and ordering numbers to 100, including ordinal numbers.	Begin to mark numbers on a landmarked line, compare and order numbers, using < and > signs, partition two digit numbers and begin to understand how many tens and ones a two digit number has

Year 2, Autumn Term 2

Wk	Strands	Progression Focus	Weekly Summary
1 / 2	**NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction	**Addition and subtraction** Week 1 focuses on adding and subtracting tens from a 2-digit number.	Understand that 2-digit numbers are made from some 10s and some 1s; Make two digit numbers using base 10, add and subtract multiples of ten to a two digit number (practically using base 10), then use partitioning / column method reinforcing place value. Add near multiples of 10 to a two digit number.
3	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction** Week 2 focuses on adding and subtracting tens from a 2-digit number.	Subtract 10, 20 and 30 to any 2-digit number; subtract 11, 21, 12 and 22 to any 2-digit number; Solve addition and subtractions by counting on and back in 10s then in 1s; solve addition and subtraction problems using concrete and pictorial representations
4	**MMD** Mental multiplication and division; **MEA** Measurement; **PRA** Problem solving, reasoning and algebra	**Using money in calculations** Week 10 focuses on counting in uniform steps, using coins to help us create sequences and find totals.	Count in 2s, 5s and 10s from zero; Count in multiples of 2p, 5p and 10p; Number sequences of 2s, 5s and 10s; Find the totals of coins and ways to make an amount; Use coins to make given amounts of money
5 / 6	**GPD** Geometry: position and direction; **MEA** Measurement	**Position and direction; length** Week 8 focuses on understanding the vocabulary associated with position and movement and then comparing and measuring lengths using cm and m.	Understand length, capacity, mass and temperature, understand the different units of measure, read scales going up in 1s, 2s, 10s, 5s and 100s. Understand and use terms and vocabulary associated with position, direction and movement; Measure lengths using uniform units; Begin to measure in centimeters and meters
7	**MEA** Measurement	**Time** Week 14 focuses on identifying 3D shapes and their properties, including naming 2D faces; and then on rehearsing telling the time on analogue and digital clocks.	Tell the time to the nearest quarter on analogue clocks *(Short introduction to this unit due to half week in school)*

Year 2, Spring Term 1

Wk	Strands	Progression Focus	Weekly Summary
1	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Bonds / Doubles/ addition subtraction**	Add 3 numbers using bonds and doubles to help

Wk	Strands	Progression Focus	Weekly Summary
2	**GPS** Geometry: properties of shapes; **GPD** Geometry: position and direction; **MEA** Measurement	**2D and 3D shapes;** Week 14 focuses on identifying 3D shapes and their properties, including naming 2D faces	Recognise and identify properties (including faces and vertices) of 3D shapes; sort according to properties including number of faces; name the 2D shapes of faces of 3D shapes, Venn diagrams, Carroll diagrams
3	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Number facts; addition and subtraction** Weeks 12 and 13 focus on revising, then using, bonds to 10 in addition (counting on, bridging 10), and	Revise number bonds to 10; begin to bridge 10; subtract from 10 and 20; use number facts to find the complement to ten;
4	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Number facts; addition and subtraction** subtraction (finding a difference, extending to calculating change).	find a difference between two numbers by counting on, find differences using a number line; find change from 10p and 20p, and from £10 to £20 by counting up and using bonds to 10 and 20; add two 2-digit numbers by counting on ;
5	**NPV** Number and place value	**Place value** Week 15 focuses on extending understanding of place value to include landmarked lines and estimation.	Order 2-digit numbers and revise the < and > signs; locate 2-digit numbers on a landmarked line and grid; round 2-digit numbers to nearest 10;
6	**MEA** Measurement	**Time** rehearsing telling the time on analogue and digital clocks.	Estimate a quantity <100 within a range. Tell the time to the nearest quarter on analogue clocks, begin to tell the time to the nearest 5 minutes on an analogue clock.

Year 2, Spring Term 2

Wk	Strands	Progression Focus	Weekly Summary
16	**MMD** Mental multiplication and division; **FRP** Fractions, ratio and proportion	**Fractions** Week 16 and focuses on doubling and halving, including odd numbers, leading to counting in halves and mixed numbers; unit and non-unit fractions are then modelled using a variety of images.	Revise doubles and corresponding halves to 15; find half of odd and even numbers to 30; Revise and recognise 1/2s, 1/4s, 1/3s and 2/3s of shapes; place 1/2s on a number line; count in 1/2s and 1/4s; understand and write mixed numbers

17	**MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra	**Multiplication and division** Week 17 focuses on 'clever counting' on the number line, and introduces the × sign for multiplication.	Count in 2s, 5s and 10s to solve multiplication problems and find specified multiples; introduce the × sign; record the 2, 5 and 10 times-tables; investigate multiplications with the same answer; write multiplications to go with arrays, rotate arrays to show they are commutative
18	**MEA** Measurement; **STA** Statistics	**Time; data** Week 18 focuses on telling the time and further develops children's understanding of the units of time; time is then used as the context for data to be represented on pictograms and block graphs.	Tell the time to the nearest quarter of an hour using analogue and digital clocks; understand the relationship between seconds, minutes and hours and use a tally chart; interpret and complete a pictogram or block graph where one block or symbol represents one or two things
19	**MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra	**Multiplication and division** Week 19 focuses on 'clever counting' using arrays as well as number lines; division is introduced as the inverse of multiplication.	Revise 2, 5 and 10 times-tables; revise arrays and hops on the number line; multiply by 2, 3, 4, 5 and 10; arrange objects into arrays and write the corresponding multiplications; make links between grouping and multiplication to begin to show division; write divisions as multiplications with holes in and use the ÷ sign
20	**MEA** Measurement; **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction	**Money and money calculations** Week 20 focuses on rehearsing coin and note values, and on writing amounts of money; money is then used as the context for adding and finding totals.	Recognise all coins, know their value, and use them to make amounts; recognise £5, £10, £20 notes; make amounts using coins and £10 note; write amounts using £.p notation; order coins 1p – £2 and notes £5 – £20; add several coins writing totals in £.p notation (no zeros in 10p place); add two amounts of pence, using counting on in 10s and 1s; add two amounts of money, beginning to cross into £s

Year 2, Summer Term 1

Wk	Strands	Progression Focus	Weekly Summary
21	**NPV** Number and place value; **MAS** Mental addition and subtraction	**Place value** Week 21 focuses on securing a robust understanding of place value, including adding and subtracting 2-digit numbers by counting on/back in 10s and 1s.	Locate, order and compare 2-digit numbers on 0-100 landmarked lines and on the 1-100 square; use < and > signs; locate numbers on an empty 0-100 line; introduce numbers 101 to 200 and count in 100s to 1000; add 2-digit numbers by counting on in 10s and 1s; subtract 2-digit numbers by counting back in 10s and 1s
22	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction** Weeks 22 and 23 focus on using number facts to solve additions and subtractions, including adding several numbers and counting up using complements to the next multiple of 10 to find a difference.	Use doubles and number bonds to add three 1-digit numbers; use number facts to 10 and 20 in number stories; find complements to multiples of 10; understand subtraction as difference and find this by counting up; find small differences either side of a multiple of 10
23	**MAS** Mental addition and subtraction	**Addition and subtraction** Weeks 22 and 23 focus on using number facts to solve additions and subtractions, including adding several numbers and counting up using complements to the next multiple of 10 to find a difference.	Add and subtract 1-digit numbers to and from 2-digit numbers; subtract 2-digit numbers by counting back in tens and ones; add two 2-digit numbers by counting in 10s, then adding 1s; add 2-digit numbers using 10p and 1p coins (partitioning, answers less than 100); add 2-digit numbers using place-value cards (partitioning, answers more than 100)

| 24 | **MEA** Measurement; **STA** Statistics | **Measures; statistics and data**

Week 24 focuses on using non-standard and standard units to measure and compare weights and capacities; and on using this context to revise the use of block graphs. | Measure weight using standard or uniform non-standard units; draw a block graph where one square represents two units; weigh items using 100g weights using scales marked in multiples of 1kg or 100g; measure capacity using uniform non-standard units; measure capacity in litres and in multiples of 100ml |
| 25 | **MMD** Mental multiplication and division; **FRP** Fractions, ratio and proportion | **Multiplication, division and fractions**

Week 25 focuses on doubling and halving as inverse operations, and relates division to fractions, including finding halves, quarters and thirds of amounts. | Double multiples of 10 and 5 (answers less than 100); double 2-digit numbers ending in 1, 2, 3 or 4 (answers less than 100); find a quarter of numbers up to 40 by halving twice; begin to find 3/4 of numbers; find 1/2 1/4 and 1/3 of amounts (sharing); spot patterns and make predictions when finding a third of numbers |

Year 2, Summer Term 2

Wk	Strands	Progression Focus	Weekly Summary
26	**MAS** Mental addition and subtraction; **NPV** Number and place value; **MEA** Measurement; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction; money** Week 26 focuses on mental addition and subtraction strategies, using number facts and place value; and on using £.p notation and solving money problems.	Count back in 10s and 1s to solve subtraction (not crossing 10s) and check subtraction using addition, beginning to understand that addition undoes subtraction and vice versa; add three or more small numbers using number facts; record amounts of money using £·p notation including amounts with no 10s or 1s; find more than one way to solve a money problem
27	**MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra	**Multiplication and division** Week 27 focuses on relating multiplication and division to 'clever counting' (steps of 2, 3, 5, 10), understanding multiplication as arrays, and solving divisions as missing number problems.	Count in 3s, recognising numbers in the 3 times-table; write multiplications to go with arrays and use arrays to solve multiplication problems; understand that multiplication is commutative and that division and multiplication are inverse operations; solve divisions as multiplications with a missing number; count in 2s, 3s, 5s and 10s to solve divisions and solve division problems in contexts
28	**MEA** Measurement	**Length; time** Week 28 focuses on estimating and measuring lengths in cm; and on telling the time to 5 minutes.	Measure and estimate lengths in centimetres; tell the time involving multiples of 5 minutes past the hour and 5 minutes to the hour; tell time to 5 minutes; begin to say the time 10 minutes later
29	**MAS** Mental addition and subtraction; **MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra	**Addition and subtraction; multiplication and division** Week 29 focuses on adding by partitioning; finding differences; and on multiplying and dividing by counting in steps.	Partition to add two 2-digit numbers; find the difference between two 2-digit numbers; multiply two numbers using counting in steps of 2, 3, 5 and 10; solve division problems by counting in steps of 2, 3, 5 and 10
30	**NPV** Number and place value; **MAS** Mental addition and subtraction	**Place value** Week 30 focuses on revising place value in 2-digit numbers, and extending to place value in 3-digit numbers.	Compare two 2-digit numbers and find bonds to 100 using thermometers; revise place value in 2-digit numbers, numbers between 100 and 200, and 3-digit numbers (including zeros in the 10s and 1s places)