Year 1. Maths Long term plan. Small step progression 2024 – 2025

Previous reception experiences and counting within 100 (cp unit 1)

National Curriculum	NCTEM 'suggested steps'	KPI small step progression
	Pupils count within 100 in different ways	Counting element to start each daily lesson and this threaded throughout year

Comparison of quantities and part-whole relationships (cp unit 2)

National Curriculum	NCTEM 'suggested steps'	KPI small step progression
See below.	Pupils explain that items can be compared using length and height	Small steps covered in reception but also threaded through new CP unit 3and 5.
	Pupils explain that items can be compared using weight/mass and volume/capacity	
	Pupils count a set of objects	
	Pupils compare sets of objects	
	Pupils use equality and inequality symbols to compare sets of objects	
	Pupils use equality and inequality symbols to compare expressions	
	Pupils explain what a whole is	
	Pupils explain that a whole can be split into parts	
	Pupils explain that a whole can represent a group of objects	
	Pupils identify a part of a whole group	
	Pupils explain what a part-whole model is	
	Pupils use a part-whole model to represent a whole partitioned into two parts	
	Pupils use a part-whole model to represent a whole partitioned into more than two parts	

Numbers 0 to 5 (NCETM unit 3) Numbers 6 to 10 (unit 5)

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Place value to 10 Number – number and place value Pupils should be taught to: count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number within 10 count, read and write numbers to 10 in numerals; given a number, identify one more and one less identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 10 in numerals and words.	Pupils explain that numbers can represent how many objects there are in a set Pupils explain that ordinal numbers show a position and not a set of objects Pupils partition numbers one to five in different ways Pupils partition the numbers one to five in a systematic way Pupils find a missing part when one part and the whole is known Pupils show one more and one less than a number using representations. Pupils describe this accurately. Pupils use a bar model to represent a whole partitioned into two parts Pupils count a set of objects and match the spoken number to the written numeral and number name Pupils represent the numbers 6 to 10 using a five and a bit structure Pupils identify the whole and parts of the numbers 6 to 10 using the five and a bit structure Pupils explore the numbers 6 to 10 using the part whole model and the five and a bit structure Pupils explain where 6, 7, 8 and 9 lie on a number line Pupils explain what odd and even numbers are and the difference between them Pupils explain how even and odd numbers can be partitioned Pupils partition numbers 6 to 10 in different ways Pupils partition the numbers 6 to 10 in a systematic way Pupils identify a missing part when a whole is partitioned into two parts	To count forwards to 10 To count backwards from 10 Partition of 5 using part part whole with apparatus Partition up of 5 using part part whole pictorially Partition to 5 using bar model Partition up to 5 in different ways Partition up to 10 using part whole model Partition up to 10 using bar model Partitioning in real life contexts To work out a missing part. One more with concrete One less with concrete One more one less on number line Comparing objects Ordering objects Ordering numbers with pictorial Ordering numbers Ordinal numbers Use number line to compare numbers Order numbers on number line

Additive structures (NCETM cp unit 6)

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Number – addition and subtraction (within 10) Pupils should be taught to: read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 10 add and subtract one-digit numbers to 10, including zero solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.	Pupils combine two or more parts to make a whole Pupils explain that addends can be represented in any order. This is called the commutative law Pupils explain that the = sign can be used to show that the whole and the sum of the parts are equal 1 Pupils explain that the = sign can be used to show that the whole and the sum of the parts are equal 2 Pupils add parts to find the value of the whole and write the equation Pupils find the missing addend in an equation Pupils partition a whole into two parts and express this with a subtraction equation Pupils make addition and subtraction stories and write equations to match Pupils represent 'first, then, now' stories with addition equations (1) Pupils represent 'first, then, now' stories with addition equations (2) Pupils represent 'first, then, now' stories with subtraction equations (1) Pupils represent 'first, then, now' stories with subtraction equations (2) Pupils represent different types of stories with subtraction calculations Pupils make addition and subtraction stories, writing equations to match Pupils work out the missing part of an addition story and equation if the other two parts are known Pupils work out the missing part of a subtraction story and equation if the other two parts are known Pupils explain that addition and subtraction are inverse operations (1) Pupils explain that addition and subtraction are inverse operations (2) Pupils use additive structures to think about addition and subtraction equations in different ways	Understanding addition and equals symbol Reasoning about addition 4 Fact families To know number bonds of 10 Adding more (using vocab and writing calculation) Adding more (using counting on skill) Finding a part Understand take away To use subtraction symbol To take away Subtraction – breaking apart 8 fact families

Addition and subtraction facts within 10 (NCETM CP unit 7)

National Curriculum	NCETM 'suggested steps'	KPI small step progression
As above	Pupils explain that addition is commutative	Previous unit
	Pupils find pairs of numbers to 10 (1)	Previous unit
	Pupils find pairs of numbers to 10 (2)	
	Pupils add and subtract 1 from any number	Covered in 1 more and l less questions linked to then + 1 and – 1 questions after addition and subtraction units are covered
	Pupils explain what the difference is between consecutive numbers	
	Pupils explain what happens when 2 is added to or subtracted from odd and even numbers	Mastering number lesson
	Pupils explain what the difference is between consecutive odd and even numbers	Mastering number lesson
	Pupils explain what happens when zero is added to or subtracted from a number	Covered in prev unit
	Pupils explain what happens when a number is added to or subtracted from itself	
	Pupils double numbers and explain what doubling means	Mastering number lesson
	Pupils halve numbers and explain what halving means	Covered in mastering number lessons plus addition and subtraction to 20 unit
	Pupils use knowledge of doubles and halves to calculate near doubles and halves	Mastering number lesson Near doubles in Y2
	Pupils represent different types of stories with subtraction calculations	
	Pupils use knowledge and strategies to add 5 and 3 and 6 and 3	7 tree and 9 square covered in mastering number slot.

Recognise, compose, decompose and manipulate 2D and 3D shapes (NCETM cp unit 4)

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Geometry – properties of shapes Pupils should be taught to: recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	Pupils compose pattern block images	Compose 3D models Name 3D shapes Sort 3D shapes Recognise 2D shapes Compose 2D shapes (use tangram images) Sort 2D shapes Reason about 2D shapes (use circles and triangles) To recognise patterns To solve problems involving 2D shape. To continue patterns.
	Pupils copy, extend and develop repeating and radiating pattern block patterns	
	Pupils compose tangram images	
	Pupils investigate tetromino and pentomino arrangements	
	Pupils investigate ways that four cubes can be composed into different 3D models	
	Pupils explore, discuss and compare 3D shapes	
	Pupils identify 2D shapes within 3D shapes	
	Pupils explore, discuss and compare 2D shapes	
	Pupils explore, discuss and identify circles and shapes that are not circles from shape cut-outs	
	Pupils explore, discuss and identify triangles and shapes that are not triangles from shape cut-outs	
	Pupils explore, discuss and identify rectangles (including squares) from shape cut-outs	

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Measurement - Time Pupils should be taught to: • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years		Covered in daily calendar maths
• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.		Covered at end of Autumn 2, beg of spring 1, beginning of summer 2 during mastering number slots.

Numbers 0 to 20 (NCETM CP unit 8)

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Place value to 20 Number – number and place value Pupils should be taught to: count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number within 20 count, read and write numbers to 20 in numerals; given a number, identify one more and one less identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 20 in numerals and words.	Pupils explain that the digits in the numbers 11 to 19 express quantity	Count forwards and backwards Understand value of teen numbers Making teen numbers with tens frames Making teen numbers with dienes and part part whole Identify teen numbers of diff pictorial representations Use knowledge of '10 and a bit' to solve problems Identify one more, one less within 20 Comparing objects and numbers Ordering objects and numbers Ordering numbers on a number line
	Pupils explain that the digits in the numbers 11 to 19 express position on a number line	
	Pupils identify the quantity shown in a representation of numbers 11 to 19	
	Pupils use knowledge of '10 and a bit' to solve problems	
	Pupils use knowledge of '10 and a bit' to solve problems	
	Pupils explore odd and even numbers within 20	During Mastering number session

Numbers 0 to 20 (NCETM unit 8) continued…

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Number – addition and subtraction (within 20) Pupils should be taught to: read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including zero solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.	Pupils double the numbers 6 to 9 and halve the result, explaining what doubling and halving is	Know doubles and halves up to 10 Know doubles and halves to 20 Add by counting on or by using known facts Solve subtraction by counting back on a number line Solve subtraction by counting back or by using known facts Find the difference To know number bonds of 10 and 20
	Pupils use knowledge of addition facts within 10 to add within 20	
	Pupils use knowledge of subtraction facts within 10 to subtract within 20	
	Pupils use knowledge of addition and subtraction facts within 10 to add and subtract within 20	
	Pupils measure one object with different non-standard measures and record outcomes	See measurement unit end of summer term
	Pupils measure items using individual cm cubes (Dienes)	
	Pupils measure length from zero cm using a ruler	
	Pupils estimate length in cm	
	Pupils estimate length, measure length and record these values in a table	

Place value to 100

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Place value to 100 Number – number and place value Pupils should be taught to: count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number within 10 count, read and write numbers to 100 in numerals; given a number, identify one more and one less identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 100 in numerals and words.	Light touch of small steps covered in Year 2 unit ….	Understand a ten and multiple of ten Represent 2-digit numbers using apparatus Represent numbers using dienes Partition and recombine 2-digit numbers 1 more / 1 less (not crossing boundaries) 1 more and 1 less (crossing boundaries) To compare numbers to 100 Order numbers to 100.

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Multiplication and division Pupils should be taught to: • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.		Multiplication and division covered in Year 2

Unitising and coin recognition Unit 9

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Number – number and place value Pupils should be taught to: • count in multiples of twos, fives and tens	Pupils count efficiently in groups of two	To count effectively in groups of two. To count effectively in groups of 5. Count efficiently in 2s, 5s and 10s, choosing the most appropriate unit to count in.
	Pupils count efficiently in groups of ten	
	Pupils count efficiently in group of five	
	Pupils count efficiently by counting in groups of two, five and ten	
Measurement - Money Pupils should be taught to: • recognise and know the value of different denominations of coins and notes	Pupils explain the value of a 1p coin in pence	Recognise coins. Know value of each coin To count coins To count mixed coins
	Pupils recognise and explain the value of 2p, 5p and 10p coins	
	Pupils explain that a single coin can be worth several pennies	
	Pupils use knowledge of the value of coins to solve problems	
	Pupils calculate the total value of the coins in a set of 2p coins	
	Pupils calculate the total value of the coins in a set of 5p coins	
	Pupils calculate the total value of the coins in a set of 10p coins	
	Pupils compare sets of 2p, 5p and 10p coins	
	Pupils relate what they have learnt to a real-life context	
	Pupils work out how many coins are needed to make a value of 10p	
	Pupils work out how many coins are needed to make a total value of 20p	
	Pupils use knowledge of the value of coins to solve problems	

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Fractions Pupils should be taught to: • recognise, find and name a half as one of two equal parts of an object, shape or quantity		Finding a half of a shape Finding half of an amount
• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.		Quarters covered in Year 2

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Measurement - Length, mass and capacity • Pupils should be taught to: • compare, describe and solve practical problems for: - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] - mass/weight [for example, heavy/light, heavier than, lighter than] - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] • measure and begin to record the following: - lengths and heights - mass/weight - capacity and volume	Pupils measure one object with different non-standard measures and record outcomes Pupils measure items using individual cm cubes (Dienes) Pupils measure length from zero cm using a ruler Pupils estimate length in cm Pupils estimate length, measure length and record these values in a table Pupils measure one object with different non-standard measures and record outcomes	Compare length and height Measure length using objects Measure length using cm Heavier and lighter Measure Mass Compare mass Full and empty Compare volume Measure capacity Compare capacity

National Curriculum	NCETM 'suggested steps'	KPI small step progression
Geometry – position and direction Pupils should be taught to: • describe position, direction and movement, including whole, half, quarter and three quarter turns.		Describe turns