



Year 3 Long Term Plan 2021-22

Term	Stand	Unit	Number of lessons
TERM 1	Number – number and place value	Place Value within 1000	11
	Number – addition and subtraction	Addition and subtraction	10
	Number – addition and subtraction	Addition and subtraction	9
	Number – multiplication and division	Multiplication and division	15
TERM 2	Number – multiplication and division	Multiplication and division	14
	Measurements	Money	5
	Statistics	Statistics	5
	Measurement	Length	11
	Number – fractions	Fractions	11
TERM 3	Number – fractions	Fractions	9
	Measurement	Time	11
	Geometry – property of shape	Angles and properties of shape	9
	Measurement	Mass	6
	Measurement	Capacity	6



Term	Strand	Unit	Lesson number	Key concepts	NC objective link	Planning days	Ready to progress
AUTUMN 1	Place Value	1	1,2	<ul style="list-style-type: none"> Counting in 100s Representing numbers to 1,000 	Recognise the place value of each digit in a three digit number (hundreds, tens, ones) Identify, represent and estimate numbers using different representations	1 day AFL 2 days PM	Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning. Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.
	Place Value	1	3,4,5,6	<ul style="list-style-type: none"> 100s, 10s and 1s The number line to 1,000 	Recognise the place value of each digit in a three digit number (hundreds, tens, ones) Compare and order numbers up to 1,000	4 days PM	
	Place Value	1	7,8,9,10,11	<ul style="list-style-type: none"> Finding 1, 10 and 100 more or less Comparing numbers to 1,000 Counting in 50s 	Compare and order numbers up to 1,000 Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Solve number problems and practical problems involving these ideas	4 days PM	
	Addition and Subtraction	2	1,2,3	<ul style="list-style-type: none"> Adding and subtracting 100s Adding and subtracting a 3-digit number and 1s Adding a 3-digit number and 1s 	Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	1 day AFL 3 days PM	Secure fluency in addition and subtraction facts within 10, through continued practice. Add and subtract mentally across 10
	Addition and Subtraction	2	4,5,6,7	<ul style="list-style-type: none"> Subtracting 1s from a 3-digit number Adding and subtracting a 3-digit number and 10s Subtracting 10s from a 3-digit number 	Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	4 days PM	
Addition and Subtraction	2	8,9,10	<ul style="list-style-type: none"> Adding a 3-digit and 2-digit number Subtracting a 2-digit number from a 3-digit number 	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	3 days PM 1 day AFL	Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?".	



HALF TERM							
AUTUMN 2	Addition and Subtraction	3	1,2,3,4	<ul style="list-style-type: none"> Addition and subtraction patterns Adding two 3-digit numbers Subtracting a 3-digit number from a 3-digit number 	<p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> <p>Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds</p>	4 days PM	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 twodigit number
	Addition and Subtraction	3	5,6,7,8,9	<ul style="list-style-type: none"> Subtracting a 3-digit number from a 3-digit number Estimating answers to additions and subtractions Checking strategies Problem solving – addition and subtraction 	<p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	5 days PM	Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 twodigit numbers.
	Multiplication and Division	4	1,2,3	<ul style="list-style-type: none"> Multiplication – equal grouping Multiplying by 3 Dividing by 3 	<p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p>	1 day AFL 3 days PM	Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables
	Multiplication and Division	4	4,5,6,7	<ul style="list-style-type: none"> 3 times-table Multiplying by 4 Dividing by 4 4 times tables 	<p>Write and calculate mathematical statements for multiplication and division using the multiplicatOion tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems including missing number problems, involving multiplication and division, including</p>		Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).



					positive integer scaling problems and correspondence problems in which n objects are connected to m objects			
	Multiplication and Division	4	8,9,10,11	<ul style="list-style-type: none"> • Multiplying by 8 • Dividing by 8 • 8 times-table • Problem solving – multiplication and division 	<p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p>	4 days PM		
	Multiplication and Division	4	12,13,14,15	<ul style="list-style-type: none"> • Problem solving – multiplication and division • Understanding divisibility • Related facts 	<p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p>	5 day PM		
	<p>FREE week – to be taken where needed for assessments Extended Daily Fluency and AFL opportunities here</p>							



Term	Strand	Unit	Lesson number	Key concepts	NC objective link	Planning days	Ready to progress
SPRING 1	Multiplication and division	5	1,2,3,4	<ul style="list-style-type: none"> Comparing multiplication and division statements Related multiplication calculations Related multiplication and division calculations Comparing multiplication and division statements (2) 	<p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p>	<p>4 PM days</p> <p>1 potential AFL day</p>	<p>Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</p> <p>Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).</p>
	Multiplication and Division	5	5,6,7,8	<ul style="list-style-type: none"> Multiplying a 2-digit number by a 1-digit number x 3 Dividing a 2-digit number by a 1-digit number 	<p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p>	<p>4 PM</p> <p>1 day mental maths / times tables</p>	



	Multiplication and Division	5	9,10,11,12	<ul style="list-style-type: none"> Dividing a 2-digit number by a 1-digit number x 2 How many ways? Mixed multiplication and Division. Problem solving - mixed problems x 2 	<p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p>	<p>4 PM lessons</p> <p>1 potential AFL</p>	<p>Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).</p>
	Multiplication and Division	5	13,14,	<ul style="list-style-type: none"> Problem solving x 2 	<p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p>	3 lessons PM	
	Money	6	1	<ul style="list-style-type: none"> Pounds and pence 	<p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	1 AFL day	
	Money	6	2,3,4,5	<ul style="list-style-type: none"> Converting pounds and pence Adding money Subtracting amounts of money Problem solving – money 	<p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>4 PM days</p> <p>1 mental maths/ times tables</p>	<p>Find different combinations of coins that equal the same amounts of money</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>
	Statistics	7	1,2	<ul style="list-style-type: none"> Pictograms X 2 	<p>Interpret and present data using bar charts, pictograms and tables</p>		



					<p>Solve one-step and two-step questions [for example, 'how many more?' and 'how many fewer?'] using information presented in scaled bar charts and pictograms and tables</p> <p><i>Depending on where assessment week falls and if you have time, you might want to fit bar charts in before half term to give flexibility around fractions.</i></p>		
SPRING 2	Statistics	7	3,4,5	<ul style="list-style-type: none"> Bar charts x 2 Tables 	<p>Interpret and present data using bar charts, pictograms and tables</p> <p>Solve one-step and two-step questions [for example, 'how many more?' and 'how many fewer?'] using information presented in scaled bar charts and pictograms and tables</p>	3 PM	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p>
	Measure	8	1	<ul style="list-style-type: none"> Measuring length 	<p>Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml)</p>	1 PM	<p>Ask and answer questions about totalling and comparing categorical data</p>



	Measure	8	2,3,4,5	<ul style="list-style-type: none"> Measuring length Equivalent lengths - metres and centimetres x 2 Comparing lengths 	Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml)	4 days PM 1 day mental maths / times tables	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
	Measure	8	6,7,8. 9 , 10	<ul style="list-style-type: none"> Adding lengths Subtracting lengths Measuring the perimeter x 2 Problem solving – length 	Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml) Measure the perimeter of simple 2-d shapes	5 lessons needed this week	Compare and order lengths, mass, volume/ capacity and record the results using >, < and = Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	Measure	8	11	<ul style="list-style-type: none"> Problem solving – length 	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	4 PM	(Year 1) recognise, find and name a quarter as one of four equal parts



	Fractions	9	1,2,3	<ul style="list-style-type: none"> Unit and non-unit fractions Making the whole Tenths 	Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	1 Day AFL	<p>of an object, shape or quantity</p> <p>Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity</p>
	Fractions	9	4,5,6,7	<ul style="list-style-type: none"> Tenths Fractions as numbers x 3 	<p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>Compare and order unit fractions, and fractions with the same denominators</p>	<p>4 PM</p> <p>1 day mental maths / times tables</p>	<p>Pupils should count in fractions up to 10, starting from any number</p>
	Fractions	9	8,9,10,11	<ul style="list-style-type: none"> Fractions of a set of objects x 3 Problem solving – fractions 	<p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>Solve problems that involve all of the above</p>	4 PM days	
EASTER HOLIDAYS							



Term	Strand	Unit	Lesson number	Key concepts	NC objective link	Planning days	Ready to progress
SUMMER 1	Fractions	10	1,2,3	<ul style="list-style-type: none"> Equivalent fractions (3 lessons) 	<p>Recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>Compare and order unit fractions, and fractions with the same denominators</p> <p>Solve problems that involve all of the above</p>	Only 3 PM lessons allowing time for prior learning recap/ pre assessment (if you want this time-move as needed)	In Year 2 Pupils use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes. They meet 4/3 as the first example of a non-unit fraction. Pupils should count in fractions up to 10, starting from any number and using the 2/1 and 4/2 equivalence on the number line (for example, 1/4 = 1/2, 1/4 = 2/8 (or 1/2 = 1/2), 1/4 = 3/12).
	Fractions	10	4,5,6,7	Comparing fractions Comparing and ordering fractions Adding fractions Subtracting fractions	<p>Compare and order unit fractions, and fractions with the same denominators</p> <p>Add and subtract fractions with the same denominator within one whole (for example, $5/7 + 1/7 = 6/7$)</p>	4 PM lessons 1 lesson for Mental Maths/ times Tables	They meet 4/3 as the first example of a non-unit fraction. Pupils should count in fractions up to 10, starting from any number and using the 2/1 and 4/2 equivalence on the number line (for example, 1/4 = 1/2, 1/4 = 2/8 (or 1/2 = 1/2), 1/4 = 3/12).
	Fractions	10	8,9	<ul style="list-style-type: none"> Problem solving – adding and subtracting fractions Problem solving with fractions of measure 	<p>Add and subtract fractions with the same denominator within one whole (for example, $5/7 + 1/7 = 6/7$)</p> <p>Solve problems that involve all of the above</p>	MAY DAY – 4 day week Only 3 PM lessons as you may need a prior assessment session for time	They meet 4/3 as the first example of a non-unit fraction. Pupils should count in fractions up to 10, starting from any number and using the 2/1 and 4/2 equivalence on the number line (for example, 1/4 = 1/2, 1/4 = 2/8 (or 1/2 = 1/2), 1/4 = 3/12).
	Time	11	1	<ul style="list-style-type: none"> Months and years 	<p>Know the number of seconds in a minute and the number of days in each month, year and leap year</p>	You might want to squeeze	This reinforces the concept of fractions as numbers and that they



						lessons 1 and 2 together depending on ability.	can add up to more than one.
	Measure – time	11	2,3,4,5,6	<ul style="list-style-type: none"> Hours in a day Estimating time Telling time to the nearest 5 minutes Telling time to the nearest minute Telling time to the nearest minute 	<p>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks</p>	5 PM lessons- three lessons on telling time to the nearest minute potentially could be condensed	
	Measure – time	11	7,8,9,10,11	<ul style="list-style-type: none"> Telling the time to the nearest minute Finding the duration Comparing the duration Finding end and start times Measuring times in seconds 	<p>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks</p>	5 PM lessons	<p>In Year 2 they compare and sequence intervals of time</p> <p>tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</p> <p>know the number of minutes in an hour and the number of hours in a day</p>
HALF TERM							
SUMMER 2	Geometry	12	1,2,3,4	<ul style="list-style-type: none"> Turns and angles Right angles in shapes Comparing angles Drawing accurately 	<p>Recognise angles as a property of shape or a description of a turn</p> <p>Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether</p>	4 PM lessons	<p>In Year 2 pupils...</p> <p>use mathematical vocabulary to describe position, direction and</p>



				angles are greater than or less than a right angle Recognise angles as a property of shape or a description of a turn		movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).
Geometry	12	5,6,7,8,9	<ul style="list-style-type: none"> Types of line x 2 lessons Recognising and describing 2D shapes Recognising and describing 3d shapes Constructing 3D shapes 	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them	5 PM lessons – could potentially condense	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ♣ identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] ♣ compare and sort common 2-D and 3-D shapes and everyday objects.
Mass	13	1,2,3,4	<ul style="list-style-type: none"> Measuring mass x 2 lessons Comparing mass Adding and subtracting mass 	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	4 PM lessons 1 AFL potential	♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ♣ identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] ♣ compare and sort common 2-D and 3-D shapes and everyday objects.
Mass	13	5,6	<ul style="list-style-type: none"> Adding / subtracting with mass 	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	5 PM lessons	In Year 2 pupils....



	Capacity	14	1,2,3	<ul style="list-style-type: none"> • Problem solving with mass • Measuring capacity x 3 lessons 	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Potential condense capacity measuring	choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels ♣ compare and order lengths, mass, volume/capacity and record the results using >, < and =
	Capacity	14	4,5,6	<ul style="list-style-type: none"> • Comparing capacity • Adding/subtracting capacity • Problem solving capacity 	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	3 PM lessons Potential time for assessments	
	Time allowance for transition / assessment. Refer to the						



The Lanes Year 3 Maths Long Term Plan
PRIMARY SCHOOL