Year 3 Maths Long Term Plan

Autumn Term

	Term 1		Term 2	
Unit Focus	**Place Value (4 weeks)**	**Statistics (2 weeks)**	**Addition and Subtraction (6 weeks)**	**Assessment**
Priority (RTP'S)	• 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. • 3NPV–4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.		• 3NF–1 Secure fluency in addition and subtraction facts that bridge 10, through continued practice. • 3NF–3 Apply place-value knowledge to known **additive** and multiplicative number facts (scaling facts by 10). • 3AS–1 Calculate complements to 100. • AS–2 Add and subtract up to three-digit numbers using columnar methods. • 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.	
National Curriculum	**Place Value** • count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • compare and order numbers up to 1000 • identify, represent and estimate numbers using different representations • read and write numbers up to 1000 in numerals and in words • solve number problems and practical problems involving these ideas. **Statistics** • interpret and present data using bar charts, pictograms and tables • 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.		Pupils should be taught to: • add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • estimate the answer to a calculation and use inverse operations to check answers • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. • add and subtract groups of small numbers, e.g. 5 – 3 + 2	
Mental maths	• Recognise the place value of each digit in a three digit number e.g. 637 is 6 hundreds, 3 tens and 7 ones. • addition and subtraction facts for all numbers to 20, e.g. 9 + 8, 17 – 9, drawing on knowledge of inverse operations • sums and differences of multiples of 10, e.g. 50 + 80, 120 – 90 • pairs of two-digit numbers with a total of 100, e.g. 32 + 68 or 32 + ? = 100 • addition doubles for multiples of 10 to 100, e.g. 90 + 90 • count on in 50's from 0. • reorder numbers when adding e.g. 8 + 7 + 5 + 2 + 3 = (8 + 2) + (7 + 3) + 5		• add or subtract a two-digit number to or from a multiple of 10, e.g. 50 + 38, 90 – 27 • add and subtract two-digit numbers e.g. 34 + 65, 68 – 35 • add near doubles, e.g. 18 + 16, 60 + 70 • identify pairs totalling 10 or multiples of 10 e.g. 24 + 38 + 16 = (24 + 16) + 38 • partition: add tens and ones separately, then recombine e.g. 56 + 78 = 50 + 70, 6 + 8 • partition: count on in tens and ones to find the total e.g. 145 + 37 = 145, 155, 165, 175, 176….. • partition: count on or back in tens and ones to find the difference e.g 72 – 68 – count on from 68	
Times tables	Review counting in steps of 2,5 and 10 Recall of facts from the 2,5, and 10 times tables Count in multiples of 4 to 12x4 in order from 0 fluently.		Recall of facts from the 2,5, and 10 times tables Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts with growing fluency.	
Retrieval	. Geometry – properties of shape, position and direction		Time – units of time and reading time from analogue clocks	
Covid Recovery	• Exploring and learning about 3 digit numbers • Using related addition and subtraction facts up to 100 e.g. 5+5=10 so 50+50 = 100.		• Turns, clockwise and anti-clockwise. • Telling the time to 15 minute or 5 minute intervals.	

	Term 3	Term 4
Unit Focus	**Multiplication and Division (6 weeks)**	**Fractions (6 weeks)**
Priority (RTP'S)	•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). •3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.	•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. 3F–4 Add and subtract fractions with the same denominator, within 1.
National Curriculum	• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • 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 • 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.	• 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 • recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators • recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators • recognise and show, using diagrams, equivalent fractions with small denominators • add and subtract fractions with the same denominator within one whole [for example, ¼ + 2/4 = ¾ • compare and order unit fractions, and fractions with the same denominators • solve problems that involve all of the above.
Mental maths	• Use place value knowledge to add or subtract e.g. 536 – 30 = 506, 230 + 450 = 680 partition teen numbers to multiply by a single digit e.g. 3 x 14 = (3x10) + (3x4) • partition: when doubling, double the tens and ones separately, then recombine e.g. 16 x 2 = (10 x 2) + (6 x 2) • partition: when halving, halve the tens and ones separately, then recombine • recognise that when multiplying by 10 or 100 the digits move one or two places to the left and zero is used as a place holder	•count up and down in tenths • multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables, and corresponding division facts • doubles of multiples of 10 to 100, e.g. double 90, and corresponding halves • apply rules of divisibility for 2, 5, 10 and 3 times table. • find unit fractions of numbers and quantities involving halves, thirds, quarters, fifths and tenths • recognise that finding a unit fraction is equivalent to dividing by the denominator and use knowledge of division facts
Times tables	Recall of facts from the 2,5, and 10 times tables Count in multiples of 4 to 12x4 in order from 0 with fluently. Recall multiples of 4up to 12x4 in any order, including missing numbers and related division facts fluently. Introduce (relating to x4) and begin to count in multiples of 8 from 0 to 12x8. Count in multiples of 8 to 12x8 in order from 0 with growing fluency.	Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts with growing fluency. Count in multiples of 8 to 12x8 in order from 0 fluently Recall multiples of 8up to 12x8 in any order.
Retrieval (Quick starter)	Measurement	Statistics
Covid Recovery	• Length – measuring in m • Weight – measuring in non-standard units, g and kg.	• Finding ½, ¼, 1/3, 2/4 and ¾ of a quantity. • Equivalence of ½ and 2/4.

	Term 5	Term 6
Unit Focus	**Geometry (3 weeks) Measurement (3 weeks)**	**Measurement**
Priority	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.	
National Curricumul	**Geometry** • draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • recognise angles as a property of shape or a description of a turn • 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 angles are greater than or less than a right angle • identify horizontal and vertical lines and pairs of perpendicular and parallel lines. **Measurement** • measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • measure the perimeter of simple 2-D shapes	**Measurement (Time)** • tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • 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, a.m./p.m., morning, afternoon, noon and midnight • know the number of seconds in a minute and the number of days in each month, year and leap year • compare durations of events [for example to calculate the time taken by particular events or tasks]. **Measurement (Money)** • add and subtract amounts of money to give change, using both £ and p in practical contexts

Mental maths	• identify right angles
	• identify horizontal, vertical , perpendicular and parallel lines.
	• double any multiple of 5 up to 100, e.g. double 35
	• halve any multiple of 10 up to 200, e.g. halve 170
	• multiply one-digit or two-digit numbers by 10 or 100, e.g. 7 × 100, 46 × 10, 54 x 100
	• use knowledge that halving and doubling are inverse operations
		•Know 60 seconds = 1 minute
		    60 minutes = 1 hour.
		    24 hours = I day.
		    365 days = 1 year
		•Know the number of days in each month
		• partition: count on or back in minutes and hours, bridging through 60 (analogue times)

Times tables	Recall division facts from the 2,5, and 10 times tables Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts fluently. Recall multiples of 8 up to 12x8 in any order, including missing numbers and related division facts with growing fluency.	Recall multiples of 2,5,10,4 and 8 up to 12x in any order, including missing numbers and related division facts fluently.
Retrieval (Quick starter)	Place Value	Fractions
Covid Recovery		