Year 4 Maths Long Term Plan

Year 4 Autumn Term

	Term 1		Term 2		
Unit Focus	**Place Value (4 weeks)**	**Addition and Subtraction (3 weeks)**	**Statistics (1wk)**	**Multiplication and division (6wks)**	**Assessment**
Priority (RTP's)	• 4NPV–1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. • 4NPV–2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning. • 4NPV–3 Reason about the location of any four digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.		• 4NPV–4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts. • 4MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. • 4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. • 4MD–3 Understand and apply the distributive property of multiplication. • 4NF–1 Recall multiplication and division facts up to 12 x 12 , and recognise products in multiplication tables as multiples of the corresponding number. • 4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)		
National Curriculum	**Place Value** • count in multiples of 6, 7, 9, 25 and 1000 • find 1000 more or less than a given number • count backwards through zero to include negative numbers • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000 • identify, represent and estimate numbers using different representations • round any number to the nearest 10, 100 or 1000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. **Addition and Subtraction** • add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • estimate and use inverse operations to check answers to a calculation • solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.		**Statistics** • interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. **Multiplication and division** • recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and commutativity in mental calculations • recognise and use factor pairs • solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. • use place value, known and derived facts to multiply and divide mentally, including:; multiplying together three numbers		
Mental maths	• Recognise the place value of each digit e.g. 4,637 is 4 thousand, 6 hundreds, 3 tens and 7 ones. 56.3 = tens, 3 ones and 3 tenths. • sums and differences of pairs of multiples of 10, 100 or 1000 • what must be added to any three digit number to make the next multiple of 100, e.g. 521 + ? = 600 • find 1000 more/less than a given number • partition: add tens and ones separately, then recombine • partition: subtract tens and then ones, e.g. subtracting 27 by subtracting 20 then 7 • subtract by counting up from the smaller to the larger number (number line)		• add or subtract any pair of two digit numbers, including crossing the tens and 100 boundary, e.g. 47 + 58, 91 – 35 • add or subtract a near multiple of 10, e.g. 56 + 29, 86 – 38 • add near doubles of two-digit numbers, e.g. 38 + 37 • add or subtract two-digit or three digit multiples of 10, e.g. 120 – 40, 140 + 150, 370 – 180 • derive number bonds to 100 and £1. • count in multiples of 25. • multiply and divide numbers to 1000 by 10 and then 100 (whole number answers), e.g. 325 × 10, 42 × 100, 120 ÷ 10, 60 ÷100, 850 ÷ 10		

	Term 1	Term 2	
Times tables	• Recall multiples of 3,4 and 8 up to 12x in any order, including missing numbers and related division facts fluently. • Fluently count in 6's in order up to 12x6, using multiples of 3 to support.	• Recall multiples of 6 in any order, including missing numbers and related division facts with growing fluency. • Fluently count in 7's in order up to 12x7.	
Retrieval (From Y3)	Measures: Time	Measures	Fractions
Covid Recovery	• tells and writes the time from: 1.an analogue clock and 2. 12-hour and 24-hour clocks • recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	• measure, compare, add and subtract: mass (kg / g); volume / capacity (l / ml) • measure, compare, add and subtract: lengths (m / cm / mm) • recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	

Year 4 Spring Term

	Term 3		Term 4		
Unit Focus	**Multiplication and Division (3wks)**	**Measurement: Area and perimeter (3wks)**	**Fractions (4wks)**	**Decimals (2wks)**	**Assessment**
Priority	• 4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.		• 4F–1 Reason about the location of mixed numbers in the linear number system. • 4F–2 Convert mixed numbers to improper fractions and vice versa. • 4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.		
National Curriculum	**Multiplication and division** • recall multiplication and division facts for multiplication tables up to 12 × 12 • multiply two-digit and three-digit numbers by a one-digit number using formal written layout **Measurement** • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares estimate, compare and calculate different measures		**Fractions** • recognise and show, using diagrams, families of common equivalent fractions • count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number • add and subtract fractions with the same denominator **Decimals** • recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to ¼ , ½ , ¾ • find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths		
Mental maths	• partition: add or subtract a multiple of 10 and adjust, e.g. 562 + 298 = 562 + 300 – 2, or 7864 – 398 = 7846 –4 00 + 2 • partition: double and adjust • use knowledge of place value and related calculations, e.g. work out 140 + 150 = 290 using 14 + 15 = 29 • multiply a multiple of 10 to 100 by a single-digit number, e.g. 40 × 3 • multiply numbers to 20 by a single-digit, e.g. 17 × 3 • identify the remainder when dividing by 2, 5 or 10 • give the factor pair associated with a multiplication fact, e.g. identify that if 2 x 3 = 6 then 6 has the factor pair 2 and 3		• pairs of fractions that total 1 • count up and down in hundredths • count on or back in hundreds, tens and ones • fraction and decimal equivalents of one-half, quarters, tenths and hundredths, e.g. 3/10 is 0.3 and 3/100 is 0.03 •count up and down in hundredths • find unit fractions and simple non-unit fractions of numbers and quantities, e.g. 3/8 of 24		
Times tables	• Recall multiples of 6 in any order, including missing numbers and related division facts fluently. • Recall multiples of 7 in any order, including missing numbers and related division facts with growing fluency.		• Recall multiples of 7 in any order, including missing numbers and related division facts fluently. • Fluently count in 9's in order up to 12x9. • Fluently count in 11's in order up to 12x11.		
Retrieval (Quick starter)	Geometry inc angles	Place Value	Multiplication and division		
Covid Recovery	• 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 • write and calculate mathematical statements for multiplication and division using the multiplication tables that students know, including for two-digit numbers times one-digit numbers using mental and progressing to formal written methods		• count up and down in tenths, recognising that tenths arise from dividing an object into 10 equal parts and in dividing one digit numbers or quantities by 10 • recognise and show, using diagrams, equivalent fractions with small denominators		

Year 4 Summer Term

	Term 5			Term 6			
Unit Focus	**Decimals (2wks)**	**Measurement: Money (2 wks)**	**Geometry: Properties of shape (2wks)**	**Geometry: (2wks)**	**Measurement (3Wks) (length, weight, time)**	**Assessment**	**Consolidation**
Priority	• 4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. • 4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.			• 4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.			
National Curriculum	**Decimals** • round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places • solve simple measure and money problems involving fractions and decimals to two decimal places. **Measurement – Money** • estimate, compare and calculate different measures, including money in pounds and pence **Geometry: Properties of shape** • compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry.			**Geometry: Properties of shape** • identify acute and obtuse angles and compare and order angles up to two right angles by size **Geometry: Position and direction.** • describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon **Measurement** • Convert between different units of measure [for example, kilometre to metre; hour to • estimate, compare and calculate different measures			
Mental maths	• name all the different triangles and quadrilaterals. • doubles of numbers 1 to 100, e.g. double 58, and corresponding halves • double any two-digit number, e.g. double 39 • double any multiple of 10 or 100, e.g. double 340, double 800, and halve the corresponding multiples of 10 and 100 • halve any even number to 200 • double and halve amounts of money e.g. double £35.60 = £71.20			• partition: count on or back in minutes and hours, bridging through 60 (analogue and digital times) •identify acute, obtuse and right angles. • convert units of measure. E.g. km to m, hour to minute. • convert between 12 hour and 24 hour clock.			
Times tables	• Recall multiples of 9 in any order, including missing numbers and related division facts with growing fluency (using 10x and adjusting by 1 group to find 9x as a strategy) • Recall multiples of 11 in any order, including missing numbers and related division facts fluently. • Fluently count in 12's in order up to 12x12.			• Recall multiples of 9 in any order, including missing numbers and related division facts fluently. • Recall multiples of 12 in any order, including missing numbers and related division facts with growing fluency (using 10x and adjusting by adding 2 more groups).			
Retrieval (Quick starter)	Statistics			Fractions			
Covid Recovery							

Link with Roman Topic:

- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.