Maths Overview – Year 4

Summer

Weeks	Learning Questions	Key Vocabulary	RTP (Ready To Progress)	
1-2	Decimal •Recognise and write decimal equivalents of any number of tenths or hundredths •Solve simple measure and money problems involving fractions and decimals to 2 decimal places •Recognise and write decimal equivalents to ¼ , ½ and ¾	Tenths, decimal, fraction, whole, hundredths, whole, equivalent, decimal point, greater than>, less than<, round, partition, equal to		
3-4	Money • Estimate, compare and calculate different measures, including money in pounds and pence	Estimate, approximate, round, pound £, pence p, decimal point, convert		
5-7	Measurement Time • Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days • Read, write and convert time between analogue and digital 12- and 24-hour clocks	Months, weeks, minutes, hours, seconds, days, year, AM, PM, convert analogue, 12-hour digital, 24-hour digital		
8-9	Geometry Shape • Recognise angles as a property of shape or a description of a turn (Y3) • Identify acute and obtuse angles and compare and order angles up to two right angles by size • 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	Clockwise, anti-clockwise, Quarter turn, half turn, three quarter turn, full turn, Right angle, acute, obtuse, Polygon, isosceles, scalene, quadrilateral, equilateral, regular, irregular		

10	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	Pictogram, horizontal axis, vertical axis, symbol, tally chart, row, table, scale, key, column, sum, difference, line graph, plot, read		
11-12	Geometry Position and Direction • Describe positions on a 2-D grid as coordinates in the first quadrant • Plot specified points and draw sides to complete a given polygon • Describe movements between positions as translations of a given unit to the left/right and up/down	Down, up, vertical, horizontal, vertex, axis, coordinates, translate, y-axis, x-axis		

Maths Overview – Year 4

Autumn

Weeks	Learning Questions	Key Vocabulary	RTP (Ready To Progress)	
1-4	<u>Number and Place Value</u> • Read and write numbers up to 1,000 in numerals and words (Y3) • Identify, represent and estimate numbers using different representations • Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) (Y3) • Count in multiples of 6, 7, 9, 25 and 1,000 • Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones) • Find 1,000 more or less than a given number • Order and compare numbers beyond 1,000 • 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 • Round any number to the nearest 10, 100 or 1,000	Number, number. Numeral, zero one, two, three, teens, numbers, eleven, twelve, twenty-one, twenty-two, one hundred, two hundred, one thousand, ten thousand, hundred thousand, million none, count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds, thousands equal to equivalent to is the same as more, less most, least tally many odd, even multiple of, factor of sequence continue predict few pattern pair, rule relationship next, consecutive > greater than < less than Roman numerals integer, positive, negative above/below zero, minus negative numbers Place value ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents, exchange, the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more, one thousand more one less, ten less, one hundred less, one thousand, less, equal to, compare, order, size, first, second, third, twentieth, twenty-first, twenty-second … last, last but on before, after next between halfway between above, below	4NPV-2	Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard 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
5-7	<u>Addition and Subtraction</u> • Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why • Estimate and use inverse operations to check answers to a calculation	Addition, add, more, and make, sum, total altogether double near double half, halve one more, two more, ten more, one hundred more, difference between, equals, is the same as number, bonds/pairs/facts, missing number, tens boundary, hundreds boundary inverse		
8	<u>Measurement Area</u> • Find the area of rectilinear shapes by counting squares	Area, covers, square centimetre (cm2), rectilinear, surface		
9-11	<u>Multiplication and Division</u> • Recall multiplication and division facts for multiplication tables up to 12 × 12 • Recognise and use factor pairs and commutativity in mental calculations • Count in multiples of 6, 7, 9, 25 and 1,000 • 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	Multiplication, multiply multiplied by multiple, factor groups of times product once, twice, three times, ten times, repeated addition, division, dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally, one, each, two each, three, each group, in pairs, threes, tens, equal groups of, doubling, halving, array, row, column, number patterns, multiplication table, multiplication fact, division fact, inverse, square, squared cube, cubed	4MD-2	Manipulate multiplication and division equations, understand, and apply the commutative property of multiplication.

Maths Overview – Year 4

Spring

Weeks	Learning Outcome	Key Vocabulary	RTP (Ready To Progress)	
1-3	<u>Number: multiplication and Division B</u> • Recognise and use factor pairs and commutativity in mental calculations • Recall multiplication and division facts for multiplication tables up to 12 × 12 • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5) • Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects • Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers	multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times … ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each … ten each group in pairs, threes … tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact inverse square, squared cube, cubed	4NF-3	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).
			4NF-1	Recall multiplication and division facts up to 12 × 12 and recognise products in multiplication tables as multiples of the corresponding number.
			4NF-2	Solve division problems, with two-digit dividends and one-digit divisors that involve remainders, and interpret remainders appropriately according to the context.
			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-3	Understand and apply the distributive property of multiplication.
4-5	<u>Measurement: Length and Perimeter</u> • Convert between different units of measure [for example, kilometre to metre; hour to minute] • Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	millimetre, centimetre, metre, kilometre, mile length, height, width, depth, breadth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher … and so on longest, shortest, tallest, highest … and so on far, further, furthest, near, close distance apart … between … to … from edge, perimeter area, covers square centimetre (cm2) ruler metre stick, tape measure	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.
6-9	<u>Number: Fraction</u> • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3) 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. • Recognise and show, using diagrams, families of common equivalent fractions • Add and subtract fractions with the same denominator	fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths …	4F-1	Reason about the location of mixed numbers in the linear number system.
			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.
10-12	<u>Number: Decimals A</u> • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3 & 4) • Recognise and write decimal equivalents of any number of tenths or hundredths • Compare numbers with the same number of decimal places up to 2 decimal places • Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths • Recognise and show, using diagrams, families of common equivalent fractions	hundredths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion	4NF-3	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).