Year 4 Maths Overview

The principles of Fluency, Problem Solving and Reasoning will be threaded throughout each unit.

<table>
<tr><th>Week</th><th colspan="4">1</th><th colspan="3">2</th><th colspan="3">3</th><th colspan="3">4</th><th colspan="3">5</th><th colspan="3">6</th><th colspan="3">7</th><th colspan="3">8</th><th colspan="3">9</th><th colspan="3">10</th><th colspan="3">11</th><th colspan="3">12</th><th colspan="3">13</th><th colspan="3">14</th></tr>
<tr><td>Autumn</td><td colspan="13">Place Value
Previous – numbers to 1000, comparing and ordering, counting in 50s and 100s, Roman Numerals to 12, near numbers
• Read and write roman numerals to 100
• Round to nearest 10
• Round to nearest 100
• Count in 1000s
• Represent 4-digit numbers in a variety of ways
• Partition 4-digit numbers in a variety of ways
• Represent and estimate numbers to 10,000 on number line
• 1000 more or less (linked to add/subtract)
• Compare 4 digit numbers
• Order 4 digit numbers
• Round to nearest 1000
• Count in 25s
• Introduce negative numbers and count back past zero
• Sequences involving negative numbers</td><td colspan="11">Addition and Subtraction
Previous – mentally add/subtract 1s, 10s or 100s, Add/subtract 3 digit numbers using formal methods. Estimate using near numbers, Check using estimates.
• Mentally add/subtract 1s, 10s, 100s and 1000s (start with equipment, move to mental)
• Add 2 4-digit numbers (no boundaries)
• Add 2 4-digit numbers (one boundary)
• Add 2 4-digit numbers (boundaries)
• Subtract 2 4-digit numbers (no boundaries)
• Subtract 2 4-digit numbers (one boundary)
• Subtract 2 4-digit numbers (boundaries)
• Choosing efficient subtraction methods
• Estimating answers
• Checking using inverses or alternative methods
• Solve addition and subtraction two step problems, deciding which operations methods to use and why</td><td colspan="5">Length and Perimeter
Previous – measure in cm, m and mm, calculate perimeter and find missing lengths
• Introduce km
• Convert between m and km
• Link km to fractions e.g ¼ km =
• Perimeters of shapes on grid
• Perimeter of a rectangle
• Missing lengths and length possibilities
• Perimeters of compound shapes</td><td colspan="14">Multiplication and Division
Previous – 3x, 4x and 8x, Multiplication and Division facts, fact families, comparing facts
• Multiply numbers by 10
• Multiply numbers by 100
• Divide by 10
• Divide by 100
• Multiply by 1 and 0
• Divide by 1, itself and 0
• Count in, multiply and divide by 6
• Know 6x multiplication and division facts
• Count in, multiply and divide by 9
• Know 9x multiplication and division facts
• Count in, multiply and divide by 7
• Know 7x multiplication and division facts
• Find 2 digit doubles and corresponding halves</td><td colspan="6">Assessment</td><td colspan="6">Area
Previous – measuring in cm, mm and m, converting measurements, perimeter
• Understanding area
• Counting full squares
• Making a shape from area (amount of squares)
• Comparing areas using <,> and =
• Put areas in order</td><td colspan="6">Mop up</td></tr>
<tr><td>Spring</td><td colspan="11">Multiplication and Division
Previous – Multiply a 2-digit by a 1-digit using expanded column. Divide a 2-digit by a 1-digit including remainders using equipment and bus stop.
• Count in, multiply and divide by 11 and 12 (link to 10x, 1x and 2x)
• Know 11x and 12x multiplication and division facts
• Multiply 3 numbers (associative law)
• Understand the terms multiple and factor.
• Find factor pairs
• Mental multiplication (link into related facts, etc)
• Multiply a 2 digit number by a 1 digit number (exp)
• Multiply a 3 digit number by a 1 digit number (exp)
• Divide a 2 digit by a 1 digit in bus stop (no remainders)
• Divide a 2 digit by a 1 digit in bus stop (with rmdrs)
• Divide a 3 digit number by a 1 digit number
• Solve correspondence problems finding all possibilities, using multiplication facts.
• Solve balancing problems.- more on this</td><td colspan="11">Fractions
Previous – finding equivalent fractions, comparing and ordering unit fractions and with the same denominator, add/subtract with the same denominator, total 1.
• Recap understanding of what a fraction is and find unit and non-unit fractions of shapes, objects and numbers.
• Identify if fraction are equivalent and find others (diagrams)
• Find equivalent fraction using multiplication and division
• Simplify fractions
• Understand that fractions can go over 1.
• Count in fractions, linking with whole numbers
• Add/subtract fractions with the same denominator where the answer is over 1
• Subtract fractions from whole amounts
• Find non-unit fractions of an amount.
• Use parts to calculate the whole</td><td colspan="14">Decimals
Previous – know tenths as decimals
• Recognise tenths and hundredths using hundred square
• Recognise tenths as decimals
• Tenths on place value grid
• Tenths on number line
• Divide 1 digit by 10
• Divide 2 digits by 10
• Understand link between tenths and hundredths
• Count in hundredths
• Recognise hundredths and decimals
• Hundredths on place value grid
• Hundredths on number line
• Divide 1 or 2 digits by 100</td><td colspan="6">Assessment</td><td colspan="6">Position and Direction
Previous – know clockwise, anti-clockwise, directional terms, horizontal and vertical.
• Introduce coordinates
• Describe position on grid
• Draw on a grid by plotting points
• Move one point on a grid
• Describe movement</td><td colspan="6"></td></tr>
<tr><td>Summer</td><td colspan="6">Decimals
• Make a whole from tenths and hundredths
• Read and write decimals
• Understand the value of each digit
• Compare decimals up to 2 DP
• Order decimals up to 2 DP
• Round 1 DP to nearest whole number
• Decimal equivalents to halves and quarters</td><td colspan="6">Money
Previous – value of coins and notes, calculate with money (separate notation), change, convert between £ and p.
• Write money using decimal notation
• Convert between £ and p using decimal notation
• Order money in different notations
• Estimate money using rounding
• Calculate with money using all 4 operations
• Solve problems</td><td colspan="8">Properties of Shape
Previous – right-angles, acute and obtuse, horizontal and vertical lines of symmetry, identify and sort 2D and 3D shapes
• Use right-angle checker to identify if angle is acute or obtuse
• Know straight line is 180°
• Compare and order angles
• Identify and sort types of triangles
• Identify and sort quadrilaterals
• Identify all lines of symmetry in 2D shapes
• Complete symmetrical patterns and shapes</td><td colspan="7">Statistics
Previous – pictograms, bar charts and tables. Collecting and presenting information
• Interpret information from bar charts, pictograms, tables, etc.
• Gather data using tally charts and present in bar chart
• Use addition and subtraction to compare and solve problems.
• Range of scales and conversions
• Introduce line graphs to show time.
• Tell the story of the graph
• Solve problems linked to line graphs</td><td colspan="7">Time
Previous – time to nearest minute, read 24 hour and 12 hour clocks, time durations, start and end times.
• Covert between time measures (use multiplication)
• Convert from analogue to 12 hour
• Convert from analogue to 24 hour
• Convert between 12 hour and 24 hour.
• Compare times and find durations</td><td colspan="6">Assessment</td><td colspan="6">Investigations</td></tr>
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