

Year 3 New Primary NC in Mathematics Statutory requirements	Comments
<p>NUMBER: Number and place value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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. 	<p>Previously Y3: 'Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times tables' and 'multiply 1 digit and 2 digit numbers by 10 and 100 and describe the effect'. Multiples of 8 and 50 are new, but link to doubling and halving, such as: 'Use knowledge of number operations and corresponding inverses, including doubling and halving, to estimate and calculations'. Finding 10 or 100 more or less than a given number has been moved down from Y4: 'Use knowledge of addition and subtraction facts and place value to derive sums and differences of pairs of multiples of 10, 100'.</p>
<p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. 	<p>Y3 previously stated: 'Add or subtract mentally combinations of 1 digit and 2 digit numbers' and 'partition 3 digit numbers into multiples of 100, 10 and 1 in different ways'. The mention of mentally adding and subtracting 3 digit numbers is new.</p> <p>The previous Y3 objectives merely stated: 'Develop and use written methods to record, support or explain addition and subtraction of 2 digit and 3 digit numbers'. The specific reference to 'formal written methods of columnar addition and subtraction' is new.</p>
<p>Multiplication and division</p> <ul style="list-style-type: none"> 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. 	<p>Previously Y3: 'Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times tables'. The reference to the 8 times table is new.</p> <p>The new PoS refers to mathematical 'statements', whereas previously these were mathematical 'sentences'. The previous Y3 objectives related to this were: 'Solve one step and two step problems involving numbers, money or measures, including time, choosing and carrying out appropriate calculations' and 'use practical and informal written methods to multiply and divide two digit numbers'.</p>
<p>Fractions</p> <ul style="list-style-type: none"> count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts & 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 e.g. $\frac{5}{17} + \frac{1}{17} = \frac{6}{17}$ compare and order unit fractions, and fractions with the same denominator solve problems that involve all of the above. 	<p>Y3 previously stated: 'count on or back from zero in single digit steps or multiples of 10'. The reference to tenths is new.</p> <p>Y3 previously stated: 'Read and write proper fractions interpreting the denominator as the parts of the whole and the numerator as the number of parts' and 'find unit fractions of numbers and quantities'; distinguishing between 'unit fractions and non-unit fractions' is new.</p> <p>Adding and subtracting fractions with the same denominator within one whole is new.</p>
<p>Measurement</p> <ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes add and subtract amounts of money to give change, using both £ and p in practical contexts 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, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute & the number of days in each month, year & leap year compare durations of events, e.g. to calculate the time taken by particular events or tasks. 	<p>Moved down from Y4: 'Draw rectangles and measure and calculate their perimeters'. Previously Y5: 'Measure and calculate the perimeter of regular and irregular polygons'.</p> <p>Y3 previously stated: Read the time on a 12 hour digital clock and to the nearest 5 minutes on an analogue clock'. No mention of roman numerals previously. Brought down from Y5: 'Read time using 24 hour clock notation.</p> <p>Moved down from Y4: 'Read time to the nearest minute; use am, pm and 12 hour clock notation'.</p> <p>Moved up from Y2: 'Use units of time (seconds, minutes, hours and days) and know the relationships between them.'</p>
<p>Geometry: properties of shapes</p> <ul style="list-style-type: none"> draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations; and describe them recognise that angles are a property of shape or a description of a turn identify right angles, recognise that 2 right angles make a half-turn, 3 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, vertical, perpendicular and parallel lines 	<p>Knowing that a right angle represents a quarter turn was previously a Y2 objective, whereas identifying right angles in 2D shapes was Y3.</p> <p>Simply identifying greater of less than 90 degrees is similar to before, although 'compare and order angles less than 180 degrees' was previously Y4 and some aspects of estimating obtuse and acute angles did not previously appear until Y5.</p> <p>Moved down from Y4: 'Recognising horizontal and vertical lines'.</p> <p>Moved down from Y5: 'recognise parallel & perpendicular lines in grids & shapes'.</p>
<p>Statistics</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions (or example 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables. 	<p>Previously a Y2 objective: 'Answer a question by collecting and recording data in lists and tables; <u>represent</u> the data as block graphs or pictograms'. Previous Y3 objectives stated: 'answer a question by collecting, organising and <u>interpreting</u> data; use tally charts, frequency tables, pictograms and bar charts'.</p>