# Year 3

# Numeracy Support Strands

| Curriculum Strand | Learning Objective Curriculum Sub-strand | Year 2 Support Strands | Year 1 Support Strands |
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| **NUMBER AND PLACE VALUE** | ✓ 3N1b - Count from 0 in multiples of 4 and 8.<br><br>✓ 3N2a - Compare and order numbers up to 1000, Read and write numbers to 1000 in numerals and in words<br><br>✓ 3N2b - Find 10 or 100 more or less than a given number<br><br>✓ 3N3 - Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)<br><br>✓ 3N4 - Identify, represent and estimate numbers using different representations<br><br>✓ 3N6 - Solve number problems and practical problems involving 3N1 – 3N5 | ✓ 2N1 -  Count in steps of 2, 3 and 5 from zero and in tens from any number, forward or backward<br><br>✓ 2N2a - Read and write numbers to at least 100 in numerals<br><br>✓ 2N2b - Compare and order numbers from 0 up to 100; use <, > and = sigs<br><br>✓ 2N3 - Recognise the place value of each digit in a two-digit number (tens, ones)<br><br>✓ 2N4 - Identify, represent and estimate numbers using different representations, including the number line<br><br>✓ 2N6 - Number and place value problem solving and reasoning | ✓ 1N1a - Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number<br><br>✓ 1N1b – Count in multiples of twos, fives and tens<br><br>✓ 1N2a - Count, read and write numbers to 100 in numerals<br><br>✓ 1N2b - Given a number, identify one more and one less<br><br>✓ 1N2c – Read and write numbers from 1 to 20 in numerals and words<br><br>✓ 1N4 - Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least |
| **CALCULATIONS (+ and -)**<br><br>... | ✓ 3C1 - Add and subtract numbers mentally, including:<br><br>✓ – a three-digit number and ones<br><br>✓ – a three-digit number and tens<br><br>✓ – a three-digit number and hundreds<br><br>✓ 3C2 – Add and subtract numbers with up to three digits, using formal written methods of column addition<br><br>✓ 3C3 - Estimate the answer to a calculation and use inverse operations to check answers<br><br>✓ 3C4 - Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | ✓ 2C1 - Recall and use addition and subtraction facts to 20 fluently<br><br>✓ 2C2a - Add and subtract numbers mentally, including:<br>- A two-digit number and ones<br>- A two-digit number and tens<br>- Two two-digit numbers<br>- Adding three one-digit numbers<br><br>✓ 2C2b - Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:<br>- A two-digit number and ones<br>- A two-digit number and tens<br>- Two two-digit numbers<br><br>✓ 2C3 – Recognise and use the inverse relationships between addition and subtraction and use this to check calculations and missing number problems<br><br>✓ 2C4 - Solve problems with addition and subtraction:<br>- using concrete objects and pictorial representations, including those involving numbers, quantities and | ✓ 1C1 - Represent and use number bonds and related subtraction facts within 20<br><br>✓ 1C2a – Add and subtract one-digit and two-digit numbers to 20, including zero<br><br>✓ 1C2b – Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs<br><br>✓ 1C4 - Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as such as<br><br>$7 = \square -9$ |

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| **CALCULATIONS (+ and -)** | | - measures<br><br>- applying their increasing knowledge of mental methods<br><br>✓ 2C9a - Show that addition of two numbers can be done in any order (commutative) and subtraction of one number by another cannot | |
| **CALCULATIONS (x and ÷)** | ✓ 3C6 – Recall and use division facts for the 3, 4 and 8 multiplication tables<br><br>✓ 3C7 - Write and calculate mathematical statements for multiplication and division using the multiplication tables that the children know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods<br><br>✓ 3C8 – Solve problems including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. | ✓ 2C6 - Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers<br><br>✓ 2C7 - Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs<br><br>✓ 2C8 -Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts<br><br>✓ 2C9b - Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | ✓ 1C8 - Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher |
| **FRACTIONS** | ✓ 3F1a - 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<br><br>✓ 3F1b - Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators<br><br>✓ 3F1c - Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators<br><br>✓ 3F2 - Recognise and show, using diagrams, equivalent fractions with small denominators<br><br>✓ 3F3 - Compare and order unit fractions and fractions with the same denominator.<br><br>✓ 3F4 - Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]<br><br>✓ 3F10 – Solve problems that involve 3F1 – 3F4 | ✓ 2F1a - Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity<br><br>✓ 2F1b - Write simple fractions for example $\frac{1}{2}$ of 6 = 3<br><br>✓ 2F2 - Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. | ✓ 1F1a - Recognise, find and name a half as one of two equal parts of an object, shape or quantity<br><br>✓ 1F1b - Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity |

ProfessorAssessor
Assessment Made Simple

| MEASUREMENT | | | |
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| **MEASUREMENT** | ✓ 3M1a – Compare lengths (m/cm/mm)<br>✓ 3M1b – Compare mass (kg/g)<br>✓ 3M1c – Compare volume (l/ml)<br>✓ 3M2a - Measure lengths (m/cm/mm)<br>✓ 3M2b – Measure Mass (kg/g)<br>✓ 3M2c – Measure volume (l/ml)<br>✓ 3M7– Measure the perimeter of simple 2d shapes<br>✓ 3M9b – Add and subtract lengths (m/cm/mm)<br>✓ 3M9c – Add and subtract mass (kg/g)<br>✓ 3M9d – Add and subtract volume/capacity (l/ml) | ✓ 2M1 - Compare and order lengths, mass, volume / capacity<br>✓ 2M2 - Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (ºC); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels | ✓ 1M1 - Compare, describe and solve practical problems for:<br>  - lengths and heights [for example, long / short, longer / shorter, tall / short, double / half]<br>  - mass or weight [for example, heavy / light, heavier than, lighter than]<br>  - capacity / volume [for example, full / empty, more than, less than, half, half full, quarter]<br>✓ 1M2 - Measure and begin to record the following:<br>  – lengths and heights<br>  – mass/weight<br>  – capacity and volume |
| **MEASUREMENT (MONEY)** | ✓ 3M9a - Add and subtract amounts of money to give change, using both £ and p in practical contexts | ✓ 2M3a – Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value<br>✓ 2M3b – Find different combinations of coins that equal the same amounts of money<br>✓ 2M9 – Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | ✓ 1M3 - Recognise and know the value of different denominations of coins and notes. |
| **MEASUREMENT (TIME)** | ✓ 3M4a - Tell and write the time from an analogue clock; 12-hour clocks<br>✓ 3M4b - Tell and write the time from an analogue clock; 24 hour clocks<br>✓ 3M4c - Tell and write the time from an analogue clock, including using Roman numerals from I to XII<br>✓ 3M4d - 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, am/pm, morning, afternoon, noon and midnight<br>✓ 3M4e - Know the number of seconds in a minute and the number of days in each month, year and leap year<br>✓ 3M4f - Compare durations of events, [for example, to calculate the time taken by particular events or tasks] | ✓ 2M4a - Tell and write the time to five minutes, including quarter past/to the hour an draw the hands on a clock face to show these times<br>✓ 2M4b – Compare and sequence intervals of time<br>✓ 2M4C - Know the number of minutes in an hour and the number of hours in a day. | ✓ 1M1 - Compare, describe and solve practical problems for time [e.g. quicker, slower, earlier, later]<br>✓ 1M2 - Measure and begin to record time<br>✓ 1M4a - Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.<br>✓ 1M4b - Sequence events in chronological order using language [for example, before and after, next, first, today,<br>✓ 1M4c - Recognise and use language relating to dates, including days of the week, weeks, months and years. |

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| **GEOMETRY (SHAPE)** | ✓ 3G2 – Identify horizontal , vertical lines and pairs of perpendicular and parallel lines<br><br>✓ 3G3a -Draw 2-d shapes<br><br>✓ 3G3b – Make 3d shapes using modelling materials; recognise 3d shapes in different orientations and describe them<br><br>✓ 3G4a - Recognise that angles are a property of shape or a description of a turn<br><br>✓ w3G4b - 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 | ✓ 2G1a - Compare and sort common 2-D and 3-D shapes and everyday objects<br><br>✓ 2G1b – Compare and sort common 3d shapes and everyday objects<br><br>✓ 2G2a - identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line<br><br>✓ 2G2b- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces<br><br>✓ 2G3 - identify 2-D shapes on the surface of 3-D shapes, e.g. a circle on a cylinder and a triangle on a pyramid | ✓ 1G1a - Recognise and name common 2-D and 3-D shapes [e.g. rectangles (including squares), circles and triangles]<br><br>✓ 1G1b- Recognise and name common 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres] |
| **GEOMETRY (POSITION/ DIRECTION)** | | ✓ 2P1 - order and arrange combinations of mathematical objects in patterns and sequences<br><br>✓ 2P2 - use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) | ✓ 1P2 - Describe position, direction and movement, including half, quarter and three-quarter turn |
| **STATISTICS** | ✓ 3S1 - Interpret and present data using bar charts, pictograms and tables<br><br>✓ 3S2 - Solve one-step and two-step questions (eg: 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables | ✓ 2S1 – Interpret and construct simple pictograms, tally charts, block diagrams and simple tables<br><br>✓ 2S2a – Ask and answer simple questions by counting the number of objects in each category and sorting the catagories by quantity<br><br>✓ 2S2b - Ask and answer questions about totalling and comparing categorical data. | |