ProfessorAssessor
Assessment Made Simple

Year 5 Numeracy Support Strands

Curriculum Strand	Learning Objective Curriculum Sub-strand	Year 4 Support Strands	Year 3 Support Strands
NUMBER AND PLACE VALUE	✓ 5N1 - Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ✓ 5N2 - Read, write, order and compare numbers to at least 1 000 000 ✓ 5N3a - Determine the value of each digit in numbers up to 1 000 000 ✓ 5N3b – Read Roman numerals to 1000 (M) and recognise years written in Roman numerals ✓ 5N4 - Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ✓ 5N5 - Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero ✓ 5N6 - Solve number problems and practical problems that involve 5N1 – 5N5	✓ 4N1 - Count in multiples of 6, 7, 9, 25 and 1000 ✓ 4N2a - Order and compare numbers beyond 1000 ✓ 4N2b- Find 1000 more or less than a given number ✓ 4N3a - Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) ✓ 4N3b - 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. ✓ 4N4a - Identify, represent and estimate numbers using different representations ✓ 4N4b - Round any number to the nearest 10, 100 or 1000 ✓ 4N5 - Count backwards through zero to include negative numbers ✓ 4N6 - Solve number and practical problems that involve all of the above and with increasingly large positive numbers	✓ 3N1b - Count from 0 in multiples of 4 and 8. ✓ 3N2a - Compare and order numbers up to 1000, Read and write numbers to 1000 in numerals and in words ✓ 3N2b - Find 10 or 100 more or less than a given number ✓ 3N3 - Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) ✓ 3N4 - Identify, represent and estimate numbers using different representations ✓ 3N6 - Solve number problems and practical problems involving 3N1 – 3N5
CALCULATIONS (+ and -)	✓ 5C1 - Add and subtract numbers mentally with increasingly large numbers ✓ 5C2 - Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) ✓ 5C3 - Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy ✓ 5C4 - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	✓ 4C2 - Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ✓ 4C3 - Estimate and use inverse operations to check answers to a calculation ✓ 4C4 - Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	✓ 3C1 - Add and subtract numbers mentally, including: ✓ – a three-digit number and ones ✓ – a three-digit number and tens ✓ – a three-digit number and hundreds ✓ 3C2 – Add and subtract numbers with up to three digits, using formal written methods of column addition ✓ 3C3 - Estimate the answer to a calculation and use inverse operations to check answers ✓ 3C4 - Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

CALCULATIONS (x and ÷)	✓ 5C5a - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers ✓ 5C5b – Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers ✓ 5C5c – Establish whether a number up to 100 is prime and recall prime numbers up to 19 ✓ 5C5d – Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) ✓ 5C6a - Multiply and divide numbers mentally drawing upon known facts ✓ 5C6b - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 ✓ 5C7a - Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers ✓ 5C7b - Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context ✓ 5C8a - Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cube ✓ 5C8b - Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign ✓ 5C8c – Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates	✓ 4C6a - Recall multiplication and division facts for multiplication tables up to 12 × 12 ✓ 4C6b - 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 ✓ 4C6c - Recognise and use factor pairs and commutativity in mental calculations ✓ 4C7 - Multiply two-digit and three-digit numbers by a one-digit number using formal written layout ✓ 4C8 - Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling and harder correspondence problems such as n objects are connected to m objects	✓ 3C6 – Recall and use division facts for the 3, 4 and 8 multiplication tables ✓ 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 ✓ 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.
FRACTIONS **…**	✓ 5F2a - Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example, 2⁄5 + 4⁄5 = 6⁄5 = 11⁄5] ✓ 5F2b- Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.read and write decimal numbers as fractions [for example, 0.71 = 71⁄100]	✓ 4F1 - Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten ✓ 4F2 - Recognise and show, using diagrams, families of common equivalent fractions ✓ 4F4 - Add and subtract fractions with the same denominator ✓ 4F6a - Recognise and write decimal equivalents to 1⁄4, 1⁄2, 3⁄4	✓ 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 ✓ 3F1b - Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators ✓ 3F1c - Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

FRACTIONS	✓ 5F3 - Compare and order fractions whose denominators are all multiples of the same number ✓ 5F4 - Add and subtract fractions with the same denominator and denominators that are multiples of the same number ✓ 5F5 - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams ✓ 5F6a - Read and write decimal numbers as fractions [for example, 0.71 = 71⁄100] ✓ 5F6b - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ✓ 5F7 - Round decimals with two decimal places to the nearest whole number and to one decimal place ✓ 5F8 - Read, write, order and compare numbers with up to three decimal places ✓ 5F10 - Solve problems involving number up to three decimal places ✓ 5F11 - Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100, and as a decimal ✓ 5F12 - Solve problems which require knowing percentage and decimal equivalents of 1⁄2 , 1⁄4 , 1⁄5, 2⁄5, 4⁄5 and those fractions with a denominator of a multiple of 10 or 25	✓ 4F6b - Recognise and write decimal equivalents of any number of tenths or hundredths ✓ 4F7 - Round decimals with one decimal place to the nearest whole number ✓ 4F8 -Compare numbers with the same number of decimal places up to two decimal places ✓ 4F9 - 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 ✓ 4F10 - 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 ✓ 4F10b - Solve simple measure and money problems involving fractions and decimals to two decimal places	✓ 3F2 - Recognise and show, using diagrams, equivalent fractions with small denominators ✓ 3F3 - Compare and order unit fractions and fractions with the same denominator. ✓ 3F4 - Add and subtract fractions with the same denominator within one whole [for example, $^5/_7 + {}^1/_7 = {}^6/_7$] ✓ 3F10 – Solve problems that involve 3F1 – 3F4
MEASUREMENT **…**	✓ 5M5 - Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] ✓ 5M6 - Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints ✓ 5M7a - Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ✓ 5M7b - Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes	✓ 4M1 – Compare different measures, including money in pounds and pence ✓ 4M2 - Estimate, compare and calculate different measures, including money in pounds and pence ✓ 4M5 - Convert between different units of measure [e.g: kilometre to metre, hour to minute] ✓ 4M7a - Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ✓ 4M7b - Find the area of rectilinear shapes by counting squares. ✓ 4M9 - Calculate different measures, including money in pounds and pence	✓ 3M1a – Compare lengths (m/cm/mm) ✓ 3M1b – Compare mass (kg/g) ✓ 3M1c – Compare volume (l/ml) ✓ 3M2a - Measure lengths (m/cm/mm) ✓ 3M2b – Measure Mass (kg/g) ✓ 3M2c – Measure volume (l/ml) ✓ 3M7– Measure the perimeter of simple 2d shapes ✓ 3M9b – Add and subtract lengths (m/cm/mm) ✓ 3M9c – Add and subtract mass (kg/g)

MEASUREMENT	✓ 5M8 - Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]. ✓ 5M9b - Use all four operations to solve problems involving measure [eg: length] using decimal notation including scaling ✓ 5M9c - Use all four operations to solve problems involving measure [eg: mass] using decimal notation including scaling ✓ 5M9d - Use all four operations to solve problems involving measure [eg: volume] using decimal notation including scaling		✓ 3M9d – Add and subtract volume/capacity (l/ml)
MEASUREMENT (MONEY)	✓ 5M9a - Use all four operations to solve problems involving measure [money] using decimal notation including scaling	✓ 4M1 – Compare different measures, including money in pounds and pence ✓ 4M2 - Estimate, compare and calculate different measures, including money in pounds and pence ✓ 4M9 - Calculate different measures, including money in pounds and pence	✓ 3M9a - Add and subtract amounts of money to give change, using both £ and p in practical contexts
MEASUREMENT (TIME)	✓ 5M4 - Solve problems involving converting between units of time.	✓ 4M4a - Read, write and convert time between analogue and digital 12--hour clocks ✓ 4Mb - Read, write and convert time between analogue and digital 24-hour clocks ✓ 4M4c - Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days ✓ 4M5 - Convert between different units of measure [e.g: kilometre to metre, hour to minute]	✓ 3M4a - Tell and write the time from an analogue clock; 12-hour clocks ✓ 3M4b - Tell and write the time from an analogue clock; 24 hour clocks ✓ 3M4c - Tell and write the time from an analogue clock, including using Roman numerals from I to XII ✓ 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 ✓ 3M4e - Know the number of seconds in a minute and the number of days in each month, year and leap year ✓ 3M4f - Compare durations of events, [for example, to calculate the time taken by particular events or tasks]

GEOMETRY (SHAPE)	✓ 5G2a - Use the properties of rectangles to deduce related facts and find missing lengths and angles ✓ 5G2b - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. ✓ 5G3b - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations ✓ 5G4a - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles ✓ 5G4b - Identify: – angles at a point and one whole turn (total 360°) – angles at a point on a straight line and 1⁄2 a turn (total 180°) – other multiples of 90° ✓ 5G4c - Draw given angles, and measure them in degrees (°)	✓ 4G2a - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ✓ 4G42b - Identify lines of symmetry in 2-D shapes presented in different orientations. ✓ 4G2c - Complete a simple symmetric figure with respect to a specific line of symmetry ✓ 4G4 - Identify acute and obtuse angles and compare and order angles up to two right angles by size	✓ 3G2 – Identify horizontal , vertical lines and pairs of perpendicular and parallel lines ✓ 3G3a -Draw 2-d shapes ✓ 3G3b – Make 3d shapes using modelling materials; recognise 3d shapes in different orientations and describe them ✓ 3G4a - Recognise that angles are a property of shape or a description of a turn ✓ 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
GEOMETRY (POSITION/ DIRECTION)	✓ 5P2 - Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	✓ 4P2 - Describe movements between positions as translations of a given unit to the left/right and up/down ✓ 4P3a - Describe positions on a 2-D grid as coordinates in the first quadrant ✓ 4P3b - Plot specified points and draw sides to complete a given polygon.	
STATISTICS	✓ 5S1 - Complete, read and interpret information in tables including timetables. ✓ 5S2 - Solve comparison, sum and difference problems using information presented in a line graph ✓	✓ 4S1 - Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs ✓ 4S2 - Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	✓ 3S1 - Interpret and present data using bar charts, pictograms and tables ✓ 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