**Primary 5 Maths Curriculum**

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| Term 1 es and os | Detail | SALs and *learner statements and possible lines of enquiry* |
| MNU 2-02a | *I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value.* | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Zero as a place holder in decimal fractions* |  |  | | --- | | *Relationship between fractional numbers, decimal fractions and percentages*  I can explain the relationship between columns as “moving to the left ten times bigger, moving to the right ten times smaller.”  I can explain that the decimal point is the separator between the whole numbers and the decimal fractions.  I can match equivalent decimal and vulgar fractions (to 1 decimal place.)  I can use the terms tenths correctly when  reading decimal fractions.  I can read numbers which have been written in digits. (to 1 decimal places)  I can record a number which I have heard read to me. (to 1 decimal places)  I can read, write, order & say numbers over 10,000. |   **Applying numeracy and mathematical skills.**   |  | | --- | | *Multiples and factors of numbers*  *Order of operations*  *Complex number sequences Impact of mathematics in our global environment* | |
| MNU 2-03a | *Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others.* | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Choose the appropriate level of accuracy in a given context* |  |  | | --- | | *Negative numbers* |  |  | | --- | | *Multiples and factors of numbers*  *Order of operations*  *Complex number sequences Impact of mathematics in our global environment* |   I am able to discuss a problem in small groups to identify the information being sought.  I can read the problem and begin to identify key words to identify what is being sought.  I can choose from a given range of numeracy processes to solve a practical problem.  I can talk with my peers about the problem and share thoughts and outcomes.  I can use my knowledge of number bonds to add within 1000 (502+498).  I can add mentally within 100 with bridging.  I can use the terms “sum of " “total of” “altogether”.  I can use the vertical written method of addition in up to 4 layers.  I have strategies to subtract any 2 digit  number from 3 digits (multiples of 100).  I can explain decomposition.  I can use the written method to subtract.  I can recognise use the language of  subtraction eg difference between, minus, less than.  I can subtract mentally within 100 using all denominations.    I can use tables facts to divide by a single digit using remainders if necessary.  I can use the vocabulary associated with division e.g. sharing, divide group etc.  I can use the relationship between multiplication and division in my work.  I can divide numbers up to 4 digits and state the remainder if necessary.  I can use a written method for division.  I can understand how to carry figures in my written method.  I can chant and recall all facts from tables up to 10.  I can answer multiplication sums using my table facts.  I can use the written method to times (up to) a 4 digit number by a single digit number to 9.  I can multiply by ten and a 100 mentally and record my answer using appropriate place value.      **Applying numeracy and mathematical skills.** |
| Term 2 es and os | Detail | SAL |
| MTH 2-05a | Having explored the patterns and relationships in multiplication and division, I can investigate and identify the multiples and factors of numbers. | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Multiples and factors of numbers* | |  |   I can recognise the patterns from  multiplication and division tables eg.  The link between the 3 and 9 times tables.    I can identify known number relationships  eg. ‘testing’ a number for divisibility by  2, 5, 9, 10 and 100.    I can use and apply my knowledge of  number properties to solve a range of  problems and puzzles. |
| MTH 2-15a | I can apply my knowledge of number facts to solve problems where an unknown value is represented by a symbol or letter.  **MTH 2-15a** | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Choose the appropriate level of accuracy in a given context*    I can find the missing numbers in simple  statements e.g. 4 + o = 8    I can create such simple statements of my  own for others to solve.    I can compare both sides of an equation and  check that they are equal.    I can show understanding that letters can be  used to represent unknown numbers.    I can work out how many of a letter there are  and can write it using the appropriate form  (e.g. t + t + t = 3t) |   **Applying numeracy and mathematical skills** |
| MTH 2-03b, 03c | *I have explored the contexts in which problems involving decimal fractions occur and can solve related problems using a variety of methods*.  ***MNU 2-03b***  Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems.  **MTH 2-03c** | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Order of operations* |   I can use decimal fractions in a variety of  everyday situations eg. Money, measure  I can investigate how the order of operations can change the answer in a calculation    The number and number process skills  contained within 2-01a, 2-03a and b should be applied to problem solving in a variety of contexts within number, money and measure  **Applying numeracy and mathematical skills.** |
| MTH 2-07a, 7b, 7c | *I have investigated the everyday contexts in which simple fractions, percentages or decimal fractions are used and can carry out the necessary calculations to solve related problems.*  ***MNU 2-07a***    *I can show the equivalent forms of simple fractions, decimal fractions and percentages and can choose my preferred form when solving a problem, explaining my choice of method.*  ***MNU 2-07b***    I have investigated how a set of equivalent fractions can be created, understanding the meaning of simplest form, and can apply my knowledge to compare and order the most commonly used fractions.  **MTH 2-07c** | **Using knowledge and understanding of the number system, patterns and relationships**   |  | | --- | | *Relationship between fractional numbers, decimal fractions and percentages*  I can recognise shapes/ numbers divided into:  simple fractions – thirds, fifths etc.  more complex fractions – three eighths, etc.    I can find simple fractions of quantities  involving 2 digits, eg ½ of 12 1/3 of 12  1/5 of 20 *(*  *only for tables to be covered in 2-03a)* |   **Applying numeracy and mathematical skills.** |
| MTH 2-16a. 16c | Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment.  **MTH 2-16a**  I can draw 2D shapes and make representations of 3D objects using an appropriate range of methods and efficient use of resources.  **MTH 2-16c** | **Using knowledge and understanding of shape and space**   |  | | --- | | *Properties of, and relationships between, 2D shapes and 3D objects* |   I can discuss 2D shapes with reference to:  Sides  Diagonals  Angles  Corners    I can discuss 3D objects with reference to:  Faces  Edges  Vertices   I can draw squares, rectangles, triangles etc.    I can draw circles using a variety of methods (drawing around) |
| MTH 2-19a | I can illustrate the lines of symmetry for a range of 2D shapes and apply my understanding to create and complete symmetrical pictures and patterns. **MTH 2-19a** | **Using knowledge and understanding of shape and space**   |  | | --- | | *Symmetry in a range of 2D shapes* |   I can identify lines of symmetry in a range  of 2D shapes by folding    I can find lines of symmetry of irregular  shapes drawn on squared grids      I can look for symmetry in nature. |
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| Term 3 es and os |  |  |
| MTH 2-17a, 17b | I have investigated angles in the environment, and can  discuss, describe and classify angles using appropriate mathematical vocabulary.  **MTH 2-17a**  I can accurately measure and draw angles using appropriate equipment, applying my skills to problems in context.  **MTH 2-17b** | **Using knowledge and understanding of measurement and its application**  *Calculate measurements*  I know that a right angle is 90 degrees.    I know that two right angles make a straight  angle.    I know that a straight angle is 180 degrees.    I can recognise when an angle is clearly  bigger or smaller that 90 degrees.    I regularly estimate angles using the  “Bananas” game (teachers tools on comp).    I can estimate simple angles in my immediate  environment.    I can recognise right angles using a  quartered circle as a measuring tool. |
| MTH 2-12a | I have worked with others to explore, and present our findings on, how mathematics impacts on the world and the important part it has played in advances and inventions.  **MTH 2-12a** | I can name various ways that mathematics  has impacted on the world and discuss these    I know that maths is incorporated in some  everyday objects e.g. computer, games  console |
| MNU 2-01a | *I can use my knowledge of rounding to routinely estimate the answer to a problem then, after calculating, decide if my answer is reasonable, sharing my solution with others.*  ***MNU 2-01a*** | I can solve problems where a specific  answer is NOT required.    I can apply what I know about rounding numbers to solve problems where an  estimated answer is required.    I can explain to others why my answer is reasonable.    **Applying numeracy and mathematical skills.** |
| MNU 2-11a, 11b, 11c | *I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure.*  ***MNU 2-11a***  *I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems.*  ***MNU 2-11b***    *I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or**volume of a simple 3D object.*  ***MNU 2-11c*** | **Using knowledge and understanding of measurement and its application**  *Convert standard units*  *Area, perimeter, volume*  I can estimate the length, width or height of an  object using cm.  I can estimate distances in km and check  using appropriate methods e.g. web based  applications  I can estimate the weight of an object to a  kilogram, half kilogram, quarter kilogram  I can the estimate the capacity of a variety of  containers using, litres, half litres, quarter  litres.  I can estimate the area of a regular shape  using cm².    I can measure accurately the length, width or  height of an object using cm.  I can convert m to cm; cm to m  I can measure accurately using kilograms, half  kilograms, quarter kilograms.  I can measure accurately using litres,  half litres, quarter litres.  I can do calculations using addition,  subtraction, multiplication and division  involving units of length, including km,  weight and capacity   I can measure accurately the perimeter of  regular shapes using cm.  I can calculate accurately the perimeter, of  regular shapes using cm.  I can measure accurately the perimeter of  irregular shapes using cm.  I can calculate accurately the perimeter of  irregular shapes using cm.  I can measure the area of regular shapes,  using cm² paper, measuring in cm² and ½cm². |
| Term 4 es and os |  |  |
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| MTH 2-16b | Through practical activities, I can show my understanding of the relationship between 3D objects and their nets.  **MTH 2-16b** | **Using knowledge and understanding of shape and space**   |  | | --- | | *Properties of, and relationships between, 2D shapes and 3D objects*  I can use appropriate terms to describe the  relationship between 3D objects and their  nets such as sides, corners (2D) vertices,  edges and faces (3D).    I can make solid 3D models using nets of:  Cubes  Cuboids | |
| MTH 2-18a | I can use my knowledge of the coordinate system to plot and describe the location of a point on a grid. **MTH 2-18a** | **Using knowledge and understanding of shape and space**   |  | | --- | | Bearings  Coordinates  I can use a coordinate system to locate a point on a grid e.g. (2,3)   I can use a coordinate system to plot a point on a grid | |
| Throughout Year |  |  |
| MTH 2-18a |  | As above |
| MTH 2-17c | Through practical activities which include the use of technology, I have developed my understanding of the link between compass points and angles and can describe, follow and record directions, routes and journeys using appropriate vocabulary. **MTH 2-17c** | I can give directions for a route or journey  orally, using programmable toys and on paper |