**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**

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|  *Zero as a place holder in decimal fractions*  |

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|  *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.**

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|  *Multiples and factors of numbers* *Order of operations* *Complex number sequences Impact of mathematics in our global environment*  |

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| 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**

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|  *Choose the appropriate level of accuracy in a given context*  |

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|  *Negative numbers*  |

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|  *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**

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|  *Multiples and factors of numbers*  |
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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**

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|  *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**

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| *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 skillscontained 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**

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|  *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**

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| *Properties of, and relationships between, 2D shapes and 3D objects*  |

I can discuss 2D shapes with reference to:SidesDiagonalsAnglesCorners I can discuss 3D objects with reference to:FacesEdgesVertices 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**

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| *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 candiscuss, 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 someeveryday objects e.g. computer, gamesconsole  |
| 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 anobject 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 kilogramI can the estimate the capacity of a variety ofcontainers using, litres, half litres, quarter litres. I can estimate the area of a regular shapeusing cm². I can measure accurately the length, width orheight of an object using cm.I can convert m to cm; cm to m I can measure accurately using kilograms, halfkilograms, 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**

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| *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:CubesCuboids  |

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| 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**

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| 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  |

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| 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 journeyorally, using programmable toys and on paper  |