Mathematics and Numeracy		
1.The number system is used to represent and compare relationships between numbers and quantities.		
Age 5 End of Reception (N and R)	**Age 8 End of year 3 (KS1 Yr 1 - 3)**	**Age 11 End of Year 6 (KS2 Yr 4 - 6)**
Progression step 1	**Progression step 2**	**Progression step 3**
MN WMS 1 PS1a I have experienced and explored numbers,including *cardinal*, *ordinal* and *nominal* numbers, in number-rich indoor and outdoor environments.	**MN WMS 1 PS 2a** I can read, write and interpret larger numbers, up to at least 1000, using digits and words.	**MN WMS 1 PS 3a** I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million.
MN WMS 1 PS1b I can notice, recognise and write numbers in a range of media, through a multisensory approach, from 0 to 10 and beyond.	**MN WMS 1 PS 2b** I can understand that the value of a number can be determined by the position of the digits.	**MN WMS 1 PS 3b** I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place *integers*, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately.
MN WMS 1 PS1c I can use mathematical language to describe quantities, and to make estimates and comparisons such as ‘more than’, ‘less than’ and ‘equal to’.	**MN WMS 1 PS 2c** I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100.	**MN WMS 1 PS 3c** I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations.
MN WMS 1 PS1d I have experienced the counting sequence of numbers in different ways, reciting forwards and backwards, and starting at different points.	**MN WMS 1 PS 2d** I am beginning to estimate and check the accuracy of my answers, using *inverse*operations when appropriate.	**MN WMS 1 PS 3d** I can demonstrate my understanding that a fraction can be used as an *operator* or to represent division. I can understand the *inverse* relation between the denominator of a fraction and its value.
MN WMS 1 PS1e I can use my experience of the counting sequence of numbers and of *one-to-one correspondence* to count sets reliably. I can count objects that I can touch, and ones that I cannot.	**MN WMS 1 PS 2e** I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any *whole number* and simple *unit fractions*.	

	MN WMS 1 PS 2f I am beginning to understand that *unit fractions* represent equal parts of a whole and are a way of describing quantities and relationships.	**MN WMS 1 PS 3f** I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations.
	MN WMS 1 PS 2g I have experienced fractions in practical situations, using a variety of representations.	**MN WMS 1 PS 3g** I can demonstrate my understanding that a fraction can be used as an *operator* or to represent division. I can understand the *inverse* relation between the denominator of a fraction and its value.
	MN WMS 1 PS 2h I have explored equivalent fractions and understand equivalent fraction relationships.	
MN WMS 1 PS1i I have explored forming a quantity in different ways, using combinations of objects or quantities.	**MN WMS 1 PS 2i** I have explored *additive relationships*, using a range of representations. I can add and subtract *whole numbers*, using a variety of written and mental methods.	**MN WMS 1 PS 3i** I can verify calculations and statements about number by *inverse* reasoning and approximation methods.
MN WMS 1 PS1j I can communicate how sets change when objects are added to and taken away from them.	**MN WMS 1 PS 2j** I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'.	**MN WMS 1 PS 3j** I can use the four arithmetic operations confidently, efficiently and accurately with *integers* and decimals, and I can combine these using *distributive*, *associative* and *commutative* laws where appropriate.
MN WMS 1 PS1k I have experienced grouping and sharing with objects and quantities, and I can group or share small quantities into equal-sized groups.	**MN WMS 1 PS 2k** I have explored and can use my understanding of *multiplicative*relationships to multiply and divide *whole numbers*, using a range of representations, including sharing, grouping and *arrays*.	**MN WMS 1 PS 3k** I have extended my understanding of *multiplicative* reasoning to include the concept and application of ratio, proportion and scale.
		MN WMS 1 PS 3l I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts.
		MN WMS 1 PS 3m I have experienced and explored simple multiplicative relationships that allow me to discuss the properties of number, including

		factors, multiples, prime and square numbers.
MN WMS 1 PS1n I have used money, and the language of money, in play and real-life situations and I can understand that I need to exchange money for items.	**MN WMS 1 PS 2n** I can understand the equivalence and value of coins and notes to make appropriate transactions in role play.	**MN WMS 1 PS 3n** I can demonstrate an understanding of income and expenditure, and I can apply calculations to explore profit and loss.
2. Algebra uses symbol systems to express the structure of mathematical relationships.		
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Progression step 1	**Progression step 2**	**Progression step 3**
MN WMS 2 PS 1a I am beginning to recognise, copy, extend and generalise patterns and sequences around me.	**MN WMS 2 PS 2a** I have explored patterns of numbers and shape. I can recognise, copy and generate sequences of numbers and visual patterns.	**MN WMS 2 PS 3a** I can explore and create patterns of numbers and shapes. I can explain numerical sequences and spatial patterns in words and by generalising them.
MN WMS 2 PS 1b I am beginning to demonstrate, using objects, an understanding of the concepts of 'equal' and 'not equal'.	**MN WMS 2 PS 2b** I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use *inequality*signs when comparing quantities to indicate 'more than' and 'less than'.	**MN WMS 2 PS 3a** I can use commutativity, *distributivity* and *associativity* to explore equality and *inequality* of expressions.
	MN WMS 2 PS 2c I have explored *commutativity* with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways.	
	MN WMS 2 PS 2e I can find missing numbers when number bonds and multiplication facts are not complete.	**MN WMS 2 PS 3e** I can demonstrate an understanding of the idea of input, application of a rule (including *inverse* operations) and output, using a *function* machine or other appropriate methods, and I have applied this idea to solve problems.
		MN WMS 2 PS 3f I can model problems, using expressions and equations involving symbols or words to represent unknown values, adopting the conventions of algebra. I can use inverse operations to find unknown values in simple equations.
3. Geometry focuses on relationships involving shape, space and position, and measurement focuses on quantifying phenomena in the physical world.		

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MN WMS 3 PS 1a I can understand and apply the language of time in relation to my daily life.	**MN WMS 3 PS 2a** I am beginning to tell the time using a variety of devices. I have explored and used different ways of showing the passing of time, including calendars, timelines, simple timetables and schedules.	**MN WMS 3 PS 3a** I can read analogue and digital clocks accurately and I can make interpretations and perform calculations involving time.
MN WMS 3 PS 1b I have used a variety of objects to measure. I am beginning to understand the need to repeat the same physical unit without any gaps when measuring.	**MN WMS 3 PS 2b** I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure.	**MN WMS 3 PS 3b** I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units.
MN WMS 3 PS 1c I can make estimates and comparisons with measures, such as 'shorter than', 'heavier than'.	**MN WMS 3 PS 2c** I can estimate and measure, using *non-standard units*, before progressing onto standard units.	**MN WMS 3 PS 3c** I can convert between standard units, including applying my understanding of place value to convert between metric units.
	MN WMS 3 PS 2d I can use a variety of measuring devices from different starting points.	
MN WMS 3 PS 1e I have explored, compared, and used the general language of shapes through investigative play.	**MN WMS 3 PS 2e** I have explored two-dimensional and three-dimensional shapes and their properties in a range of contexts.	**MN WMS 3 PS 3e** I can explore and consolidate my understanding of the properties of two-dimensional shapes to include the number of sides and symmetry.
	MN WMS 3 PS 2f I have explored reflective symmetry in a range of contexts and I can discuss it as a property of shapes and images.	**MN WMS 3 PS 3f** I can explore vertices, edges and faces of three-dimensional shapes and I can use these characteristics to describe a three-dimensional shape.
		MN WMS 3 PS 3g I can relate a three-dimensional shape to its two-dimensional nets.
		MN WMS 1 PS 3m I can use efficient methods for finding the perimeter and area of two-dimensional shapes, understanding how basic formulae are derived.
MN WMS 3 PS 1j I have explored movements and directions and I am beginning to use mathematical language to describe position.	**MN WMS 3 PS 2j** I can describe and quantify the position of objects in relation to other objects.	**MN WMS 3 PS 3j** I have developed an understanding of the ways in which co-ordinates are used to solve problems involving position, length and shape.

	MN WMS 3 PS 2k I have explored the concept of rotation and I am beginning to use simple fractions of a complete rotation to describe turns.	**MN WMS 3 PS 3k** I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles.
4. Statistics represent data, probability models chance, and both support informed inferences and decisions.		
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Progression step 1	**Progression step 2**	**Progression step 3**
MN WMS 4 PS 1a I can investigate, collect and record data found in my environment.	**MN WMS 4 PS 2a** I can collect and organise data to ask and answer questions in relevant situations.	**MN WMS 4 PS 3a** I can collect different types of data to answer a variety of questions that have been posed, demonstrating an understanding of the importance of collecting relevant data.
MN WMS 4 PS 1b I can group sets into categories and I am beginning to communicate the rule(s) I have used.	**MN WMS 4 PS 2b** I can sort and classify using more than one criterion, including the use of Venn diagrams and Carroll diagrams.	
	MN WMS 4 PS 2c I am beginning to record and represent data in a variety of ways, including the use of tally charts, frequency tables and block graphs, when appropriate axes and scales are provided.	**MN WMS 4 PS 3c** I can represent information by creating a variety of appropriate charts of increasing complexity, including tally charts, frequency tables, bar graphs and line graphs.
MN WMS 4 PS 1d I am beginning to represent and interpret data, using a range of methods.	**MN WMS 4 PS 2d** I am beginning to interpret and analyse simple graphs, charts and data.	**MN WMS 4 PS 3d** I can use different scales to extract and interpret information from a range of diagrams, tables and graphs, including pie charts with simple fractions and proportions. I can recognise any trends that are seen.
	MN WMS 4 PS 2e I can explain my findings and I am beginning to evaluate how well my method worked.	**MN WMS 4 PS 3e** I can find and use the mean of a simple set of data to explain how the statistics do, or do not, support an argument. I can recognise how anomalies affect the mean.
		MN WMS 4 PS 3g I can explore outcomes and chance, using appropriate language, and I am beginning to use numerical values to represent probability.