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Children's Services

FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	⟷	Progression	⟷	Benchmarks
Organiser—Number, money and measure	Estimation and rounding	I can/am able to:	I can/am able to:	I can/am able to:	
	I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate	• With support, investigate ways/ strategies to estimate the answer to a simple calculation or problem.	• Talk about the ways/strategies that I use to estimate an answer to a calculation or problem.	• Make a choice about the ways/ strategies that I use to estimate an answer to a calculation or problem and discuss this with others.	• ***Uses strategies to estimate an answer to a calculation or problem, for example, doubling and rounding***
	MNU 1-01a	• With support, begin to talk about how these ways/strategies can be used to check solutions to actual calculations.	• Use my knowledge & skills in number to solve a calculation or problem & begin to compare this with my estimate.	• Compare my actual solution to a calculation or problem with my estimate & discuss whether my solution "makes sense".	• ***Rounds whole numbers to the nearest 10 and 100 and uses this routinely to estimate and check the reasonableness of a solution***
	Link to MNU 1-02a, MNU 1-03a & MNU 1-11a	• With support, use manipulatives , pictures or stories to round whole numbers to the nearest 10 & to the nearest 100 e.g. using number lines.	• Round whole numbers accurately to the nearest 10, 100.	• Use my rounding skills to estimate & check answers to a calculation or problem.	
		• With support, talk about when I have to round up or round down.	• Use my rounding skills to make estimates to calculations or problems.		

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FIRST LEVEL	NUMERACY AND MATHEMATICS			
Experiences and Outcomes	Progression			Benchmarks
Organiser—Number , money and measure Number and number processes	I can/am able to:	I can/am able to:	I can/am able to:	
I have investigated how whole numbers are constructed, can understand the importance of zero within the system & can use my knowledge to explain the link between a digit, its place & its value. ***MNU 1-02a*** **Link to:** **MNU 1-01a & MNU 1-03a** **This experience continues into the next page.**	• Partition numbers within 20 e.g.23 = 20 + 3. • Identify the value of digits in 2 digit numbers correctly using the terms "tens" & "ones". • Use concrete materials, mental methods, counting on, bridging to 10, doubles & my knowledge of partitioning etc. to add within 20. • Use concrete materials, mental methods & counting on & back skills etc. to do subtraction within 20 e.g. cubes, ten frames, rekenreks, counters, number lines. • Show that the addition of two numbers can be done in any order (commutative law). • Through exploration develop the understanding that subtraction is not commutative e.g. through number fact families. • Read, recite, write, order (sequential & non-sequential) whole numbers within 20 from any given number. • Explore the 2 times table using concrete materials e.g. repeated addition, groups of 2, dot patterns, arrays, hundred square, skip/jump counting etc. • Count forwards and backwards in 2s. • Explore odd and even numbers	• Partition 3 digit whole numbers • Identify the value of digits in 3 digit numbers correctly using the terms "hundreds", "tens" & "ones". • Use concrete materials & number skills (including mental methods) to add and subtract within 100. • Explore & discuss other mathematical vocabulary for addition e.g. sum, total. • Compare numbers & use the signs < (less than) ,> (greater than) & = (equals) • Read, recite, write, order (sequential & non-sequential) whole numbers within 100 from any given number. • Explore the 4, 5 & 10 times table using concrete materials e.g. repeated addition, groups of 4, 5 & 10, dot patterns, arrays, hundred square, skip/jump counting etc. • Count forwards and backwards in 5s & 10s. • Through exploration develop the understanding that multiplication is commutative e.g. pictorial representations, arrays.	• Partition any whole numbers within 1000. • Identify the value of digits in 4 digit numbers correctly using the terms "thousands", "hundreds", "tens" & "ones". • Use concrete materials & number skills (including mental methods) to add and subtract within 1000. • Explore & discuss other mathematical vocabulary for multiplication & division e.g. product, quotient & remainder. • Compare numbers & use the signs ≤ (less than and/or equal to), ≥ (greater than and/or equal to) & ≠ (not equal to). • Read, recite, write, order (sequential & non-sequential) whole numbers within 1000 from any given number. • Explore the 3 times table using concrete materials e.g. repeated addition, groups of 3, dot patterns, arrays, hundred square, skip/jump counting etc. • Count forwards and backwards in 100s. • Make array patterns to show multiplication & use tables knowledge to determine multiplication facts.	• ***Demonstrate understanding of zero as a placeholder in whole numbers to 1000*** • ***Identifies the value of each digit in a whole number with three digits, for example,867=800+60+7.*** • ***Uses correct mathematical vocabulary when discussing the four operations including, subtract, add, sum of, total, multiply, product,, divide and shared equally.*** • ***Reads, writes, orders and recites whole numbers to 1000, starting from any number in the sequence*** • ***Demonstrates understanding of the commutative law, for example, 6+3=3+6 or 2x4=4x2*** • ***Applies strategies to determine multiplication facts, for example, repeated addition, grouping, arrays and multiplication facts.*** • ***Counts forwards and backwards in 2s, 5s, 10s and 100s.***

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL		NUMERACY AND MATHEMATICS			
Experiences and Outcomes		Progression			Benchmarks
Organiser—Number , money and measure	Number and number processes		I can/am able to:	I can/am able to:	I can/am able to:
		I have investigated how whole numbers are constructed, can understand the importance of zero within the system & can use my knowledge to explain the link between a digit, its place & its value.	• With support, begin to explore the 10 times table using my number skills & knowledge of the 2 times table to double 10 and multiples of 10 e.g. 5 + 5 = 10, 10 + 10 = 20, 20 + 20 = 40.	• With support, begin to explore the 100 times table using my number skills & knowledge of the 2, 5 & 10 times table.	• Use table facts for the 2, 3, 4, 5 & 10 times tables.
		MNU 1-02a	• With support, identify the correct operation to solve a problem & discuss using appropriate vocabulary e.g. add, subtract, multiply, share equally, total etc.	• Identify the correct operation to solve a problem & discuss using appropriate mathematical vocabulary.	• With support, identify the most efficient steps to solve a problem & discuss the operations & methods involved using appropriate mathematical vocabulary.
		Link to MNU 1-01a & MNU 1-03a	• Solve addition and subtraction whole number problems with 2 digits e.g. find the missing number in a number sequence.	• Use concrete materials & number skills to add and subtract multiples of 10 to & from any whole number within 100.	• Use concrete materials & number skills to add and subtract multiples of 10 & 100 to & from any whole number within 1000.
		This experience is continued from the previous page.		• Solve simple addition and subtraction whole number problems with 3 digits e.g. link to real life contexts such as money.	• Solve addition and subtraction whole number problems with 3 digits e.g. could introduce (as a formal written method) expanded column method through partitioning; Do not go any further into column methods however.

• ***Applies strategies to determine multiplication facts, for example, repeated addition, grouping, arrays and multiplication facts.***

• ***Adds and subtracts multiples of 10 or 100 to or from any whole number to 1000***

• ***Uses correct mathematical vocabulary when discussing the four operations including, subtract, add, sum of, total, multiply, product,, divide and shared equally.***

• ***Solves addition and subtraction problems with three digit whole numbers.***

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
Organiser—Number, money and measure	Number and number processes	I can/am able to:	I can/am able to:	I can/am able to:	
	I can use addition, subtraction, multiplication & division when solving problems, making best use of the mental strategies & written skills I have developed. ***MNU 1-03a*** **Link to MNU 1-01a & MNU 1-02a**	• Use concrete materials to solve division calculations or problems using my knowledge of sharing equally e.g. sharing a number of items between a different number of people.	• Use concrete materials to solve division calculations or problems using my knowledge of grouping & repeated subtraction e.g. how many groups of 5 are in 15?	• Use multiplication knowledge & other appropriate strategies (including mental methods) to determine division facts.	• ***Applies strategies to determine division facts, for example, repeated subtraction, equal groups, sharing equally, arrays and multiplication facts.***
		• Discuss & express my methods for solving division calculations or problems in words and pictures.	• Through exploration & patterns in multiplication tables, link division to inverse multiplication e.g. discuss & express the fact families in words & symbols: 3 lots of 5 make 15, 5 lots of 3 make 15 (5 x 3 = 15), there are 5 groups of 3 in 15 & there are 3 groups of 5 in 15 (15 ÷ 3 = 5) etc.	• Discuss & express my methods for solving division calculations or problems in words, pictures, symbols & informal jottings.	• ***Uses multiplication and division facts to solve problems within the number range 0 to 1000***
		• Use multiplication facts to solve calculations & problems within 20.	• Use multiplication & inverse multiplication facts to solve calculations & problems within 100.	• Use multiplication & division facts to solve calculations & problems within 1000.	• ***Multiplies and divides whole numbers by 10 and 100 (whole number answers only)***
		• With support, show that when you multiply a whole number by 10, you increase the place value by one place e.g. use base 10 number sets (Dienes).	• With support, show that when you multiply a whole number by 100, you increase the place value by two places e.g. use base 10 number sets (Dienes).		• ***Applies knowledge of inverse operations (addition and subtraction; multiplication and division).***
			• With support, show that when you divide a whole number by 10 or 100, you decrease the place value by one or two places e.g. use base 10 number sets (Dienes).	• Use concrete materials & multiplication & division skills to multiply whole numbers by 100 (whole number answers only).	
			• Use concrete materials & multiplication skills to multiply & divide whole numbers by 10 (whole number answers only).		
	Pupils should be offered opportunities to apply their mental strategies & written skills to solve problems with more than one step through a relevant context e.g. Money - MNU 1-09a	• With support, begin to solve two step addition & subtraction problems applying my number skills and knowledge of the relationship between addition and subtraction.	• With support, begin to solve two step multiplication & division problems applying my number skills and knowledge of the relationship between multiplication and division.	• Solve two step problems involving addition, subtraction, multiplication and/or division by applying my number skills and knowledge of inverse operations.	• ***Solve two step problems.***
		• Check my calculations using the link between addition & subtraction.	• Check my calculations using the link between multiplication & division.	• Check my calculations using my knowledge of inverse operations.	

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
Experiences and Outcomes		⟷	Progression	⟷	Benchmarks
Number, money and measure	Organiser—Multiples, Factors &Primes	There are no Experiences, Outcomes or Benchmarks at this level			
	Organiser—Powers and Roots	There are no Experiences, Outcomes or Benchmarks at this level			

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

Organiser—Number , money and measure

Fractions, Decimal Fractions & Percentages

FIRST LEVEL	NUMERACY AND MATHEMATICS			
Experiences and Outcomes	**Progression**			**Benchmarks**
	I can/am able to:	**I can/am able to:**	**I can/am able to:**	
Having explored fractions by taking part in practical activities, I can show my understanding of: • ***how a single item can be shared equally*** • ***the notation & vocabulary associated with fractions*** • ***where simple fractions lie on the number line.*** ***MNU 1-07a*** **Link to MNU 1-03a**	• Investigate & explore equal shares of single objects & items from my own or wider environment e.g. sharing a cake at a party. • With support, discuss & recognise the pattern between the number of equal shares and the size of each share e.g. the more people that have to equally share one whole pizza, the smaller the size of pizza slice they will each get. • Through stories, concrete materials, pictorial representations, practical activities & using my knowledge of halves, explore quarters e.g. understand that when a single item or group is split equally in 4 it is quartered,1 whole = 4 quarters & each part is 1 quarter. • With support, use pictorial representations to represent fair/ equal sharing e.g. bar modelling.	• Investigate & explore equal shares of odd numbers and odd numbered groups of items/objects. • Identify & explain the link between the number of equal shares and the size of each share. • Through stories, concrete materials, pictorial representations, practical activities & using my knowledge of division, explore quarters, fifths and tenths. • Begin to explore eighths through stories, concrete materials, pictorial representations & practical activities. • With support, record how a fraction is written & discuss correct vocabulary e.g. how the division is represented by the '-' line, the bottom number is the number of equal shares & called the denominator etc.	• Using correct notation and mathematical vocabulary, explain what a fraction is (including the role of the numerator and denominator). • Through stories, concrete materials, pictorial representations, practical activities & using my knowledge of division, explore thirds, eighths and simple common non unit fractions e.g. 2/3, 3/4 etc. • Using correct notation and mathematical vocabulary, record common fractions to tenths e.g. 1/2, 2/3 & 5/8.	• ***Explains what a fraction is using concrete materials, pictorial representations and appropriate mathematical vocabulary*** • ***Demonstrates understanding that the greater the number of equal parts, the smaller the size of each share.*** • ***Uses the correct notation for common fractions to tenths, for example,*** ***1 2 5*** ***- - and -*** ***2 3 8*** • ***Compares the size of fractions and places simple fractions in order on a number line.*** • ***Explains the role of the numerator and denominator***
Through exploring how groups of items can be shared equally, I can find a fraction of an amount by applying my knowledge of division. ***MNU 1-07b***	• With support, explore where halves and quarters lie on a number line e.g. discuss where they are in relation to the number 1. • Through stories, concrete materials & practical activities, find halves of 1 or 2 digit whole numbers within 20 (even numbers only). • Using my knowledge of halves, find quarters of appropriate 1 or 2 digit whole numbers within 20.	• Compare the size of common fractions & explore where they sit on a number line (1/2 , 1/4, 1/5 & 1/10). • Find common unit fractions (1/2 , 1/4, 1/5 & 1/10) of up to 3 digit appropriate whole numbers e.g. using concrete materials and/or known multiplication & division facts, making use of bar modelling etc. • Find common unit fractions (1/2 , 1/4, 1/5 & 1/10) of appropriate amounts in simple problems.	• Compare the size of fractions & explore where common, simple fractions sit on a number line. • Find common unit fractions (1/2, 1/3, 1/4, 1/5, 1/10) within 1000 of appropriate whole numbers e.g. using concrete materials and/or known multiplication & division facts, making use of bar modelling etc. • Find common unit fractions (1/2, 1/3, 1/4, 1/5, 1/10) of appropriate amounts in simple problems.	• ***Uses known multiplication and division facts and other strategies to find unit fractions of whole numbers, for example,*** ***1 1*** ***- or -*** ***2 4.***

Potential to link these experiences and outcomes to practical activities such as Time MNU 1-10a & Measurement MNU 1-11a & 1-11b

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	⟷	Progression	⟷	Benchmarks
Organiser—Number , money and measure	Fractions, Decimal Fractions & Percentages	**I can/am able to:**	**I can/am able to:**	**I can/am able to:**	
	Through taking part in practical activities including use of pictorial representations, I can demonstrate my understanding of simple fractions which are equivalent. **MTH 1-07c** **Link to MNU 1-07a & MNU 1-07b**	• Through stories, concrete materials, pictorial representations & practical activities, recognise & explain the equivalence of 2/4 and ½ e.g. using bar modelling.	• Through stories, concrete materials, pictorial representations & practical activities, recognise & explain the equivalence of ½ & other appropriate common fractions e.g. using bar modelling. • Through stories, concrete materials, pictorial representations & practical activities, recognise & explain the equivalence of fifths & tenths & quarters & eighths e.g. using bar modelling.	• Through stories, concrete materials, pictorial representations & practical activities, recognise & explain the equivalence of simple & appropriate common fractions e.g. using bar modelling.	• Uses pictorial representations and other models to demonstrate understanding of simple equivalent fractions, for example. 1 2 3 - = - = - 2 4 6

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes		Progression		Benchmarks
Organiser—Number, money and measure	Money	***I can use money to pay for items & can work out how much change I should receive.*** ***MNU 1-09a***	**In a range of contexts across my learning, I can/am able to:** • Identify & name all coins & notes to £5 e.g. through role play, games etc. • With support, experiment with coins as manipulatives to create the same value using different coin combinations e.g. 10 x 10 p coins = 1 x £1 coin • With support, explore & investigate amounts in £ & p notation when using money e.g. £1 = 100 p, £2 = 200 p and/or 2 x £1	**In a range of contexts across my learning, I can/am able to:** • Identify and name all coins and notes to £10 e.g. through matching exercises, snap games etc. • Explore & investigate amounts in £ & p notation when using money e.g. 140 p = £1.40 • Write down/represent amounts in different ways using the correct notation within £10 e.g. 20p = £0.20.	**In a range of contexts across my learning, I can/am able to:** • Identify and name all coins and notes to £20. • Write down/represent mixed amounts in different ways using the correct notation within £10 e.g. 350p = £3.50	• ***Identifies and uses all coins and notes to £20 and explores different ways of making the same total*** • ***Records amounts accurately in different ways using the correct notation, for example, 149p = £1.49 and 7p = £0.07***
		I have investigated how different combinations of coins & notes can be used to pay for goods or be given in change. ***MNU 1-09b***	• Explore & use different combinations of coins & notes up to £5 to pay for items with a specific price e.g. what combinations could be used at the tuck shop to buy something which costs £1 &10 pence. • Use number skills & knowledge (including mental) to work out totals within £5. • Use number skills & knowledge (including mental) to work out change within £5. • Solve simple problems in a practical context involving addition & subtraction of money within £5. • With support, and/or through play, begin to investigate how goods can be paid for other than in cash e.g. debit and credit cards.	• Explore & use different combinations of coins & notes up to £10 to pay for items. • Use number skills & knowledge (including partitioning & mental agility) to work out totals within £10. • Use number skills & knowledge (including partitioning & mental agility) to work out change within £10. • Solve problems in a practical context involving addition & subtraction of money within £10 e.g. partitioning the pounds & pence where necessary. • Explore & investigate how goods can be paid for other than in cash e.g. drama role play or discussion/ demonstration of the use of vouchers, contactless payment.	• Explore different combinations of coins and notes up to £20 to make the same total. • Use number skills & knowledge (including mental) to work out totals within £20 & change within £10. • Solve problems in a practical context involving addition of money within £20 & subtraction within £10. • Talk about or show how to make non-cash payments for goods e.g. apple pay etc.	• ***Uses a variety of coin and note combinations, to pay for items and give change within £10*** • ***Applies mental agility number skills to calculate the total spent in a shopping situation and is able to calculate change*** • ***Demonstrates awareness of how goods can be paid for using cards and digital technology***

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FIRST LEVEL | **NUMERACY AND MATHEMATICS**

Experiences and Outcomes			Progression			Benchmarks
Organiser— Number, money and measure	Time	***I can tell the time using 12 hour clocks, realising there is a link with 24 hour notation, explain how it impacts on my daily routine & ensure that I am organised and ready for events throughout my day.*** ***MNU 1-10a*** **Link to MNU 1-07a & b**	**I can/am able to:** • Use my knowledge of fractions & 2D shape to understand why we use the terms 1/2 past the hour on an analogue clock face • Recognise that 1 hour = 60 minutes • Recognise that half past the hour = 30 minutes • Read, write & use analogue & digital clocks to show o'clock & 1/2 past (12 hour only) • Give examples of things I do at o'clock and half past the hour in my daily routine • Begin to use the language of time correctly, using terms such as day & night, morning, afternoon, evening, . • Recognise that the time can look the same at 2 different points in each day e.g. I eat my breakfast at 7.30 in the morning = am, & have my bath at 7.30 =pm in the evening	**I can/am able to:** • Use my knowledge of fractions & 2D shape to understand why we use the terms 1/4 past & 1/4 to the hour on an analogue clock face • Say how many minutes there are in 1/4 past the hour = 15 minutes & 1/4 to = 45 minutes • Read, write & use analogue & digital clocks to show o'clock , 1/2 past, 1/4 past & 1/4 to the hour (12 hour only) • Give examples of things I do at o'clock ,half past, 1/4 past & 1/4 to the hour in my daily routine • Use the language of time correctly, introducing terms such as noon, midnight, sunrise, sunset. • Recognise that there are 24 hours in a day—12 before noon and 12 after noon.	**I can/am able to:** • Use my knowledge of the 5 times table to explore how 1 hour = 60 mins is shown on a clock face e.g. groups of 5 minutes—why is each group of 5 numbered in the way it is? • Notice that some analogue clocks have a 3rd hand which measures seconds & be able to say that 1 minute = 60 seconds • Read, write & convert times between digital & analogue & vice-versa—o'clock, 1/4 & 1/2 past & 1/4 to. • Give examples of things I do a.m.& p.m. • Use the language of time e.g. noon = meridian to correctly say what a.m. & p.m. mean. [teachers may wish to tell the story of the first timepieces, • Recognise o'clock , 1/2 past, 1/4 past & 1/4 to the hour when shown in 24hr notation on digital devices	• ***Tell the time using half past, quarter past and quarter to using analogue and digital 12 hour clocks*** • ***Records 12 hour times using am and pm and is able to identify 24 hour notation, for example, on a mobile phone or computer.*** • ***Knows the number of seconds in a minute, minutes in an hour, hours in a day, days in each month, week and days in a year.***
		I can use a calendar to plan and be organised for key events for myself & my class throughout the year. ***MNU 1-10b***	• Say how many days are in a week • Use calendars to count and/or mark off the number of days in each month • Link/say the number/order of the days & months, using the correct letters after each number e.g. 1st = first day of the month, month of the year, 2nd = second, etc. • Explore simple ways to record dates using the day, month, & year e.g. 5th March 2016 • Link/say which months belong to each season • Mark or note real-life tasks & events into a calendar	• Say the months of the year in order/ sequence • Use calendars to look for patterns relating to the number of days in each month e.g. using familiar rhymes • Explore & record dates in different ways for different purposes using numbers and words e.g. 05.03.07 or 5/3/07, Monday 5th of March 2007 • Make & follow a simple work timetable for myself and/or my class (12 hour clock only) • Use real-life schedules to note & mark times for appointments, events , favourite TV programmes, piano lesson, judo class, etc	• Talk about the number of weeks and days in a year—including a leap year • Link/talk about how length of day, month & year are linked to the movement of the Sun, Moon & Earth • Identify/show/talk about seasonal events & changes • Place events into a simple weekly schedule or timetable to help me organise school work & real-life • Use a calendar to plan for events which will happen over the year, e.g. Christmas Fayre, my birthday, school trip, family birthdays, holidays, etc.	• ***Records the date in a variety of ways, using words and numbers*** • ***Uses and interprets a variety of calendars and 12 hour timetables to plan key events*** • ***Orders the months of the year and relates these to the appropriate seasons.***

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	⟷	Progression	⟷	Benchmarks
Organiser— Number, money and measure Time	***I have begun to develop a sense of how long tasks take by measuring the time taken to complete a range of activities using a variety of timers.*** ***MNU 1-10c***	**I can/am able to:** • Explore how sand & clock timers can help me to estimate how long everyday tasks take e.g. eating a snack, changing for gym (collaborative working) • Use appropriate language when talking about the passage of time e.g. won't take long, will be quick/slow, a wee while. • Talk about the passage of longer periods of time - how it feels & what we can do in 1/2 hour and/or an hour e.g. let's work for 1/2 hour, talk about how it feels, then make a list of what we get done.	**I can/am able to:** • Start & stop a variety of timers to measure how long everyday tasks take. • Compare & record estimated times taken for simple everyday tasks & events e.g. to walk/drive home, until your next birthday, etc. (using timers, 1/4 hours, 1/2 hours, hours, days, weeks, months, years) • Talk about how & when timers are useful in everyday life e.g. to help us work out how fast/slow we need to work, whether we are getting faster at running our daily mile, how to cook our meals.	**I can/am able to:** • Use a variety of timers to explore the flexibility and accuracy that comes with measuring time in seconds as well as minutes, hours, days e.g. deciding who has placed first in a sporting race, cost of a phone call, etc. • Compare & record estimated times with measured times. • Give reasons why some timers would be more suited to certain tasks—sand timers set a deadline for quick tasks, digital timers may be more accurate for exact timing.	• ***Knows the number of seconds in a minute, minutes in an hour, hours in a day, days in each month, week and days in a year.*** • ***Selects and uses appropriate timers for specific purposes.***

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
Organiser— Number, money and measure	Measurement	I can/am able to:	I can/am able to:	I can/am able to:	
	I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. ***MNU 1-11a*** **Link to MNU 1-01a**	• Make reasonable estimate s of length, height, mass & capacity using everyday things e.g. how many books fit into your bag, how many steps is it to the dinner hall	• Make reasonable estimate s of the length, height, mass & capacity of everyday things using centimetres/ metres, grams/kilograms, millilitres/litres)	• Make reasonable estimate s of the length, height, mass & capacity of everyday things to the nearest standard unit	• ***Uses knowledge of everyday objects to provide reasonable estimates of length, height, mass and capacity***
		• Explore instruments which can be used to measure the length, height, mass & capacity of everyday things e.g. rulers, measuring tape, metre sticks, scales, measuring jugs	• With support, select the most appropriate devices to measure the length, height, mass or capacity of everyday objects.	• Select the most appropriate devices to measure the length, height, mass or capacity of everyday objects.	• ***Makes accurate use of a range of instruments including rulers, metre sticks, digital scales and measuring jugs when measuring lengths, heights, mass and capacities using the most appropriate instrument for the task.***
		• Demonstrate how to use a variety of instruments to complete simple measuring tasks	• With support measure & weigh everyday objects accurately using a variety of instruments.	• Measure & weigh (to the nearest standard unit) everyday objects accurately using a variety of instruments.	• ***Records measurements of length, height, mass and capacity to the nearest standard unit, for example, millimetres (mm), centimetres (cm), grams (g), kilograms (kg), millilitres (ml), litres (l).***
		• With support, recognise & use abbreviations to read & record units of length, height, mass & capacity. (including centimetres/metres, grams/kilograms, millilitres/litres)	• Recognise & apply my knowledge of relationships between units e.g. 1m = 100cm, 1/2m = 50 cm, 1kg = 1000g, 1/2kg = 500 g, 1 l = 1000ml, 1/2 l = 500ml	• Recognise & apply my knowledge of relationships between units e.g. 1/4m = 250cm, 750 g = 3/4 kg, 1/10 l = 100ml	
		• With support read a variety of scales on measuring devices including thermometers to record measurements using the correct words, numbers & units e.g. the desk is 42 centimetres long .	• Read a variety of scales on measuring devices to record measurements including thermometers using the correct words, numbers, & units - making simple conversions between units of measure where required e.g. 1100 g = 1 kg 100 g	• Read a variety of scales on measuring devices including thermometers to record these measurements using the correct words, numbers & units making conversions between units of measure where required e.g. 1/2 a litre = 500 ml	• ***Compares measures with estimates.***
		• With support say how accurate estimates are when compared to actual measurements.	• Comment on how accurate estimates are when compared to actual measurements.	• Discuss & compare estimates & measurements to check how reasonable & accurate they are.	• ***Uses knowledge of relationships between units of measure to make simple conversions, for example, 1m 58cm= 158cm.***
					• ***Reads a variety of scales on measuring devices including those with simple fractions, for example, 1/2 litre.***

Potential to link these experiences and outcomes to fraction skills and knowledge. MNU 1-07a, b & c

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL		NUMERACY AND MATHEMATICS			
Experiences and Outcomes		Progression			Benchmarks
Organiser— Number, money and measure	Measurement	I can/am able to:	I can/am able to:	I can/am able to:	
	I can estimate the area of a shape by counting squares or other methods. ***MNU 1-11b***	• Use non-standard units to explore & estimate the area of various simple 2D shapes e.g. using bricks, cubes, tiles & counters.	• Use standard units to explore & estimate the area of various simple 2D shapes e.g. using 1 cm square grids, metre square grids outdoors, etc.	• Use standard units to estimate the area of simple regular & irregular shapes including half squares.	• ***Uses square grids to estimate then measure the areas of a variety of simple 2D shapes to the nearest half square.***
			• Use dot patterns and arrays to explore & estimate the area of various sized squares and rectangles (whole numbers only).	• Begin to recognise & talk about the multiplication pattern which helps me calculate the area of simple shapes e.g. using arrays, notice that the area links to multiplying the length of adjoining sides of rectangles & squares.	
		• Measure the area of various simple 2D shapes by counting in non-standard units.	• Measure the area of various simple 2D shapes by counting in standard units.	• Measure the area of various simple regular & irregular 2D shapes by counting in standard units including half squares.	
			• Use the abbreviations cm^2 and m^2 to show I am counting the area of shapes in 1 centimetre squares or 1 m squares.		
		• Use non-standard units to explore & create shapes with a given area e.g. using bricks, cubes, tiles.	• Use standard units to explore & create simple 2D shapes with a given area.	• Use standard units to create various regular & irregular 2D shapes with a given area including half squares.	• ***Create shapes with a given area to the nearest half square using square tiles or grids.***
		• Use non-standard units to investigate simple shapes which all have the same area.	• Use standard units to explore & create how to make simple 2D shapes with the same area.	• Explain or show how different shapes can have the same area.	• ***Recognises that different shapes can have the same area (conversation of area).***

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FIRST LEVEL	NUMERACY AND MATHEMATICS			
Experiences and Outcomes	⟷	**Progression**	⟷	**Benchmarks**
Organiser— Number, money and measure Mathematics - its impact on the world, past, present and future	**I can/am able to:**	**I can/am able to:**	**I can/am able to:**	
I have discussed the important part that numbers play in the world & explored a variety of systems that have been used by civilisations throughout history to record numbers . **MTH 1-12a**	• Describe how numbers are useful to me in real life e.g. importance of numbers when planning events such as a party for catering. • Talk about how numbers & quantities were written and/or recorded by cultures & civilisations in the past e.g. tally marks, hieroglyphs, Roman numerals, the abacus, etc.	• Describe how numbers are useful when people are at work e.g. time-keeping, budgeting or costs. • Say how cultures & civilisations in the past used their number systems to develop their everyday life & work e.g. the importance of trade within & between cultures.	• Talk about the work of Scottish people who have used numbers and ideas to affect peoples' lives & work e.g. how the first banks evolved, mathematicians & engineers using maths/number to build bridges, etc. • Describe how people in the past used numbers to make their lives easier & better.	• Investigates and shares understanding of the importance of numbers in learning, life and work • Investigates and shares understanding of a variety of number systems used throughout history

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
Organiser—Number, money and measure	Patterns and Relationships	I can/am able to:	I can/am able to:	I can/am able to:	
	I can continue & devise more involved repeating patterns or designs, using a variety of media. MTH 1-13a	• Copy & continue more complex repeating patterns involving shapes, pictures, symbols & movements (using a variety of media)	• Use counting in real life scenarios to create more complex repeating patterns e.g. shapes, pictures & symbols, perhaps other opportunities indoors & out, such as dance, sound, music.	• Recognise & talk about number patterns & sequences in the natural & man-made world e.g. repeating shapes & symbols, tessellation of honeycomb, architecture, etc.	• Continues and creates repeating patterns involving shapes, pictures and symbols.
	Through exploring number patterns, I can recognise & continue simple number sequences & can explain the rule I have applied. MTH 1-13b	• Using manipulatives, pictorial representations and/or concrete materials, notice & continue number patterns by counting in 2, 5, & 10 e.g. using dot patterns, a hundred square, 5 frames, 10 frames & number lines.	• Using manipulatives, pictorial representations and/or concrete materials, notice that number patterns in 2, 4, 5, & 10s link to multiplication tables e.g. beginning to link repeated addition to multiplication (additive reasoning).	• Create & continue number patterns & sequences from any whole number up to 1000 using jumps of 2, 3, 4, 5, & 10 e.g. linking to multiplication tables.	• Counts forwards and backwards in 2s, 5s and 10s from any whole number up to 1000
		• Recognise & continue odd & even number sequences	• Recognise that adding two odd numbers results in an even total & that adding two even numbers will always result in an even total.	• Recognise that even numbers are divisible by two with no remainder, but odd numbers will have a remainder when divided by two.	• Describes patterns in number, for example, in the multiplication tables and hundred square
		• Explore & continue simple addition & subtraction number sequences e.g. where the rule is add or subtract 4 each time or filling in the missing number.	• Recognise, continue & explain the addition & subtraction rules for simple number sequences	• Create simple addition & subtraction number sequences using numbers up to 1000—describing my rules to others.	• Describes, continues and creates number patterns using addition, subtraction, doubling, halving, counting in jumps (skip counting) and known multiples.
		• Recognise relationships within addition e.g. 2+4 = 6, 4+2 = 6 (commutative law).	• Recognise patterns within addition & subtraction, e.g. 3+7, 13+7, 23+7, 56 - 10, 46 -10, 36 -10.	• Recognise patterns within addition & subtraction, e.g. 123+9, 133+9, 143 + 9 (discussing most efficient methods like add 10 subtract 1)	
		• Explore & continue number sequences where doubling or halving is the rule. (using even numbers only for halving)	• Use concrete materials, dot patterns & array diagrams to recognise relationships within multiplication, e.g. 4x5 = 5x4 (multiplicative reasoning & commutative law& links to area).	• Create & explain simple multiplication number sequences using numbers up to 1000.	

Please note opportunities to link these experiences and outcomes to fraction and area skills and knowledge. MNU 1-02a, 1-03a, 1-11b & 1-19a

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
Organiser— Number, money and measure	Expressions and Equations	I can/am able to:	I can/am able to:	I can/am able to:	
	I can compare, describe & show number relationships, using appropriate vocabulary & the symbols for equals, not equal to, less than & greater than. **MTH 1-15a**	• Use the words 'equal to', 'not equal to', 'less than', 'greater than', correctly to describe & show number relationships e.g. The number of sheep in that field is greater than the number of sheep in the other field. • Within numbers to 20, use manipulatives to create & show whether number relationships are "equal to', 'not equal to', 'less than', 'greater than' e.g. Games or challenges using number frames, number strings, rekonreks.	• Use symbols (=. ≠, <, >) or words 'equal to', 'not equal to', 'less than', 'greater than', correctly to describe & show number relationships e.g. 45> 32, means 45 is greater than 32. • Within numbers to 100, complete number statements using <, >, = , ≠ . • Within numbers to 100, create number statements using <, >, = , ≠ .	• Use symbols (=. ≠, <, >) or words 'equal to', 'not equal to', 'less than', 'greater than', to describe & show number relationships from real-life contexts (linking to other areas of numeracy such as time, money & measure) e.g. 1000g = 1 kg, 45 minutes > 1/4 hour • Within numbers to 1000, translate word problems from real-life contexts using <, >, = , ≠ (linking to other areas of numeracy such as time, money & measure) e.g. Would you rather have three £2 coins or one £5 note?	• Understands and accurately uses the terms 'equal to', 'not equal to', 'less than', 'greater than', and the related symbols (=. ≠, <, >) when comparing quantities.
	When a picture or symbol is used to replace a number in a number statement, I can find its value using my knowledge of number facts & explain my thinking to others. **MTH1-15b**	• Within numbers to 20, use manipulatives and/or my knowledge of Fact families, number stories to find the missing numbers in given statements when pictures or symbols are used to replace a number. • While adding, subtracting, multiplying & dividing, explain the thinking & knowledge I am using to help me complete number statements including the role of the equal sign as a balance	• Within numbers to 100, use manipulatives and/or my knowledge of Fact families, number stories to find the missing numbers in given statements when pictures or symbols are used to replace a number. • Begin to use a basic notation method to explain/show my thinking while solving simple algebraic problems e.g. function machine • Begin to show my understanding that the statements on either side of an equals sign must balance (i.e. be equal) by creating my own simple algebraic problems.	• Within numbers to 1000, use manipulatives and/or my knowledge of Fact families, number stories to find the missing numbers in statements when pictures or symbols are used to replace a number. • While adding, subtracting, multiplying & dividing, use formal working to show how I solve simple algebraic problems • Explain & show my understanding that solving simple algebraic problems requires the use of opposite operations e.g. by solving given problems & creating problems for others to solve. (reciprocal teaching). • Say that this type of problem is called an equation.	• Applies understanding of the equals sign as a balance, and knowledge of number facts, to solve simple algebraic problems where a picture or symbol is used to represent a number, ◆ + 17 = 30 and ◆ X 6 = 30.

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL	NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression		Benchmarks
Organiser— Shape, position and movement	Properties of 2D shapes & 3D objects	I can/am able to:	I can/am able to	I can/am able to
	I have explored simple 3D objects & 2D shapes & can identify, name & describe their features using appropriate vocabulary MTH 1-16a	• Name & identify common 2 D shapes such as circles, squares, rectangles & triangles. • Begin to recognise that when some 2D shapes gain the dimension of height, they become 3D prisms e.g. cubes, cuboids, cylinders, triangular prisms • Explore the properties of other 3 D objects & recognise these in my environment e.g. pyramids, cones, spheres. • Identify 2D shapes within 3D objects • Name & identify common 3 D objects such as cylinders, cubes, cuboids, triangular prisms. • With support, begin to use new vocabulary correctly when exploring the properties of common 2D shapes & 3D objects e.g. right angles, vertex/vertices, base, edges.	• With support, begin to name & identify a wider range of 2 D shapes including trapezium, parallelogram, rhombus, kite, & relevant polygons found in everyday life e.g. coins, honeycomb. • Name & recognise common 3 D objects e.g. cubes, cuboids, cylinders, prisms, pyramids, cones, spheres, hemispheres. • Recognise common 2 D shapes & 3 D objects regardless of their size or orientation. • Begin to recognise the component 2D shapes which make up a 3 D object e.g. A cuboid is made of squares & rectangles. • Compare & sort common 2D shapes & 3D objects according to their properties e.g. pairs of equal opposite sides, shapes with right angles, shape of each face on a prism. • Begin to recognise simple 3D objects when represented as 2 D images e.g. cubes, cuboids, cylinders	• Recognise, name & identify a wider range of 2 D shapes including trapezium, parallelogram, rhombus, kite & most polygons found in everyday life . • Describe the properties of 2D shapes e.g. square has 4 equal sides, 4 equal angles • Use appropriate vocabulary to describe the properties of 3 D objects e.g. a cylinder has 3 faces, 1 base & no vertices. • Recognise that a 3D object is made up of 2 D shapes & begin to explore how to show its composite shape e.g. drawing, making - indoors or outdoors, digital image. • Recognise 3 D objects when represented as 2 D images including triangular prisms & square based pyramids.	• Names, identifies and classifies a range of simple 2D shapes and 3D objects and recognises these shapes in different orientations and sizes. • Uses mathematical language to describe the properties of a range of common 2D shapes and 3D objects including side, face, edge, vertex, base and angle. • Identifies 2D shapes within 3D objects and recognises 3D objects from 2D drawings.

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FALKIRK NUMERACY & MATHEMATICS PROGRESSION PATHWAY—FIRST LEVEL

FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes		Progression		Benchmarks
Organiser— Shape, position and movement	Properties of 2D shapes & 3D objects		I can/am able to:	I can/am able to:	I can/am able to:
		I can explore & discuss how & why different shapes fit together & create a tiling pattern with them **MTH 1-16b** **Link to MNU 1-16a & MNU 1-19a**	• Play with & explore how shapes fit together to make other shapes & simple tiling patterns e.g. 4 small squares arranged to make a larger square. • Play with & explore different types of triangles to discover how to make new shapes & patterns e.g. 4 triangles make a square or rectangle. • Discover & describe how 2D shapes & 3D objects fit together in the world around me e.g. patterns in brickwork, tiles & fabric.	• By investigating which 2 D shapes will tile, begin to make simple designs & tiling patterns which incorporate more that one shape . • Begin to notice & learn why different types of triangles make certain new shapes & patterns e.g. 2 of their sides are equal = isosceles, all 3 sides equal = equilateral, 2 right-angled triangles can make a square or rectangle. • With support, begin to talk about how & why certain 2 D shapes fit together or make simple patterns e.g. the shapes have sides of equal length, angles/vertices which are the same, etc. • With support, copy examples of simple tiling patterns I discover in the world around me	• Create tiling patterns which incorporate two different shapes e.g. squares, rectangles, triangles, hexagons, pentagons • Talk about how & why the angles of certain 2 D shapes enable them to make new shapes or tiling patterns e.g. a kite = 2 different isosceles triangles OR 4 right-angled triangles arranged in 2 pairs. • Create tiling patterns which apply & incorporate my knowledge of the properties of different types of triangles e.g. 6 equilateral triangles will form a hexagon. • Explore & recreate tiling patterns I see in the world around me e.g. potential IDL link to pattern & printing in art & design	• Identifies examples of tiling in the environment and applies knowledge of the features of 2D shapes to create tiling patterns incorporating two different shapes.

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FIRST LEVEL	NUMERACY AND MATHEMATICS			
Experiences and Outcomes	← Progression →			Benchmarks
Organiser— Shape, position and movement Angles, Symmetry and Transformation	**With & without technology, I can/am able to:**	**With & without technology, I can/ am able to:**	**With & without technology, I can/am able to:**	
I can describe, follow and record routes & journeys using signs, words and angles associated with direction & turning. **MTH 1-17a**	• Understand that journeys are made of changes in direction. • Recognise the names of the 4 compass or cardinal points (north, south, east & west) & explore their relationship indoors & out e.g. drawing maps, games, etc. • Use positional vocabulary such as left & right, backwards & forwards, up & down to show & follow simple directions. • Use positional vocabulary such as left & right, backwards & forwards, up & down to make quarter turns, half-turns & full turns. • With support, interpret simple maps to follow routes e.g. through cones, Beebot, etc.	• Understand that journeys are made of changes in direction & that these changes result in angles & that angles are measured in units called degrees • Use the terms north, south, east & west when giving directions. • Give & understand directions for turning through angles including full turn, half turn, quarter turn, clockwise, anticlockwise, right turn, left turn, right angle • Make the connection that a quarter turn = right angle = 90^{o}. • Make the connection that a half turn = 2 right angles (= 180^{o}) • Make the connection that a 3/4 turn = 3 right angles (= 270^{o}) AND a full turn = 4 right angles (= 360^{o}) • Use signs, words & angles to follow & begin to create routes, journeys & simple maps.	• Say that a right angle has 90^{o}. • Recognise the names of the 8 compass points (north, south, east & west, north east, south east, north west, south west) • Follow & give directions using this language • Represent various routes or journeys using signs, words, angles & appropriate positional language	• Uses technology and other methods to describe, follow and record directions using words associated with angles, directions and turns including, full turn, half turn, quarter turn, clockwise, anticlockwise, right turn, left turn, right angle. • Knows that a right angle is 90o. • Knows and uses the compass points, North, South, East and West • Uses informal methods to estimate, compare and describe the size of angles in relation to a right angle. • Finds right angles in the environment and in well-known 2D shapes.

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
		I can/am able to:	I can/am able to:	I can/am able to:	
Organiser— Shape, position and movement	Angles, Symmetry and Transformation				
	I have developed an awareness of where grid reference systems are used in everyday contexts & can use them to locate & describe position. **MTH 1-18a**	• With support, through practical activities, count/describe the position of objects within a grid. e.g. 3rd column, 2nd row. • With support, through practical activities, begin to understand & use appropriate vocabulary to describe the position of objects within a grid e.g. rows, columns, axis/axes, horizontal, vertical, grid reference. • Use grid references (numbers & letters) to describe where an object sits within a grid e.g. understanding the convention that horizontal location is before vertical & using correct form (A,3). • With support, use grid references (numbers & letters) to find landmarks or objects on simple maps e.g. say which column & row it sits within on the grid.	• Through practical activities, begin to create grids which can be used to describe the position of objects e.g. to locate objects within the grid, game of Battleships • Begin to plot the position of objects within a grid using given two figure references e.g. navigation activities indoors & out . • Explore how a variety of real-life maps use references to help us locate landmarks or objects e.g. number + letter or number + number references (Digital maps, Ordnance survey maps, road maps).	• Apply my ability to accurately plot, use & describe two figure grid references in a range of real-life contexts e.g. finding treasure, simple orienteering tasks. • Say why people need to use grid references in everyday life & talk about jobs which need these skills e.g. air traffic control, archaeologists, armed forces.	• Describes, plots and uses accurate two figure grid references, demonstrating knowledge of the horizontal and vertical location. • Identifies where and why grid references are used.
	I have explored symmetry in my own & the wider environment & can create & recognise symmetrical pictures, patterns & shapes. **MTH 1-19a**	• Explore & identify which simple 2D shapes are symmetrical e.g. vertical & horizontal lines of symmetry. • Complete the missing half of a symmetrical pattern or shape to show my understanding of reflective symmetry—both vertical & horizontal lines of symmetry. • Explore & identify symmetrical objects, pictures & patterns in the world around me e.g. architecture, trees & creatures reflected in water.	• With support, explore & identify 2D shapes, patterns & pictures which have more than one line of symmetry e.g. discovering diagonal & multiple lines of symmetry. • Complete the missing elements of a symmetrical pattern, picture or shape which has more than one line of symmetry. • With support, begin to copy & create symmetrical patterns or designs influenced by examples I discover in the world around me e.g. vertical, horizontal, diagonal lines of symmetry.	• Identify 2D shapes, patterns & pictures which have more than one line of symmetry e.g. wallpaper patterns, snow flakes, the work of artists, designers & architects, etc. • Copy & create symmetrical patterns, pictures or designs influenced by examples I discover in my own & the wider environment e.g. nature, the work of artists, designers & architects, etc.	• Identifies symmetry in patterns, pictures, nature and 2D shapes. • Creates symmetrical pictures and designs with more than one line of symmetry.

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
	Experiences and Outcomes	Progression			Benchmarks
Organiser— Information Handling	Data and Analysis	I can/am able to:	I can/am able to:	I can/am able to:	
	I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains ***MNU 1-20a***	• Explore & talk about how information/ data can be displayed pictorially & in simple Venn & Carroll diagrams. (using real-life examples) • Using real life examples, begin to explore & talk about how information/ data can be displayed in block graphs e.g. the move to a numbered scale where one object or drawing represents one data value. • Ask & answer simple questions about the data displayed pictorially in simple Venn & Carroll diagrams &	• Explore & talk about how data can be displayed using Venn & Carroll diagrams & block graphs (including digital representations) e.g. comparing the same data in different formats. • Begin to explore & talk about how information/data can be displayed in bar graphs e.g. comparing & noticing differences between block & bar graphs. (using real-life examples) • Begin to ask & answer questions which show awareness of key information displayed e.g. Compare largest/ smallest quantities, what information fits into more than one category.	• Explore & talk about how data can be displayed using Venn & Carroll diagrams & block & bar graphs (including digital representations) e.g. . • Explore & talk about how different charts, diagrams & graphs are used in real life e.g. format is chosen according to type of information & purpose of text. • Ask & answer questions which identify the key information being displayed in a range of formats.	• **Asks and answers questions to extract key information from a variety of data sets including charts, diagrams, bar graphs and tables.**
	I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria ***MNU 1-20b***	• Explore a range of ways in which to collect information e.g. favourite foods, toys, etc. by conducting simple surveys with a small number of potential categories. • Explore a range of ways in which to sort, count & organise information using my own & others' criteria e.g. by grouping, counting, tally marks & knowledge of number.	• With support, select & identify collection methods which are best suited to particular purposes or real-life tasks. • With support, sort & record information accurately for a given purpose using my own & others' criteria e.g. using a tally table.	• Select & use the most appropriate way from a variety of different methods (including digitally) to gather & sort data for specific purposes.	• **Selects and uses the most appropriate way to gather and sort data for a given purpose, for example, a survey, questionnaire or group tallies.**
	Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale **MTH 1-21a**	• Add data accurately to given diagrams & graphs —including digitally—where one object or drawing represents one data value. • Use a numbered scale where one object or picture represents one data value to create a pictogram or block graph. • With support, explore & identify appropriate titles & labelling when making simple diagrams & graphs.	• With support, begin to display data by creating Venn & Carroll diagrams & block & bar graphs, including digitally. • With support, begin to use a numbered scale where one object or picture represents more than one data value to create a pictogram, diagram or bar graph e.g. counting in 2, 5 & 10s • Begin to independently identify appropriate titles & labelling related to my categories & purpose when making simple Venn & Carroll diagrams & block & bar graphs.	• Create a variety of different tables, charts & diagrams to display data accurately, including digitally. • Apply knowledge of tables to identify appropriate scales for use in tables, charts and diagrams . • Identify & use appropriate titles & labelling related to my categories & purpose when making simple Venn & Carroll diagrams & block & bar graphs.	• Uses a variety of different methods, including the use of digital technologies, to display data, for example, as block graphs, bar graphs, tables, Carroll diagrams and Venn diagrams. • Includes a suitable title, simple labelling on both axes and an appropriate scale where one unit represents more than one data value in graphs.

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FIRST LEVEL		NUMERACY AND MATHEMATICS			
Experiences and Outcomes		Progression			Benchmarks
Organiser— Information Handling	Ideas of Chance and Uncertainty				
	I can use appropriate vocabulary to describe the likelihood of events occurring, using the knowledge and experiences of myself and others to guide me.	**I can/am able to:**	**I can/am able to:**	**I can/am able to:**	
	MNU 1-22a	• Say whether events might or might not happen e.g. that it will/won't rain.	• Give examples of everyday events saying or showing whether these are likely or unlikely, certain or uncertain, probable, and possible or impossible.	• Continue to extend my ability to give examples of the likelihood of everyday events by saying or showing whether these are fair or unfair e.g. an Olympic sprinter taking part in school races, "The tortoise and the hare " (this story could provoke interesting debate about all of this vocabulary)	• **Uses mathematical vocabulary appropriately to describe the likelihood of events occurring in everyday situations including, probable, likely/unlikely, certain/uncertain, possible/ impossible, and fair/unfair.**
		• Begin to use the terms likely, unlikely, certain or impossible, to describe how likely an event will be.	• Routinely use the above vocabulary to make predictions about the likelihood of every day events from given or gathered data.	• Discuss events & data from everyday experiences using vocabulary that includes the words "equally likely, fair, unfair "	• **Interprets data gathered through everyday experiences to make reasonable predications of the likelihood of an event occurring**
		• Give examples of events which are probable e.g. that we will feel hungry by tea time, that someone will do really well in class today, etc.	• Use an empty number line to show how these likelihoods could be ordered e.g. one end of line = impossible ,whilst the other end = certain	• Use a number line to show the likelihood of an event e.g. zero = impossible, 1 = certain; include the use of the 1/2 way point to position where likely, unlikely, probable events should be.	