Medium Term Planning- Maths
Milestone 1

Week	Objective	Strands	Milestone 2	Basic	Advance	Deep
1	To Know and use numbers	• Counting	• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	With help or structure, there is counting forwards to and across 100, beginning with 0 or 1.	With prompts, there is counting to and across 100, forwards and backwards from any given number.	Independently, there is counting to and across 100, forwards and backwards, from any given number.
			• Count, read and write numbers to 100 in numerals;	With support: - Up to 10 objects can be counted - Numbers to 10 can be read and written	Generally, numbers between 0 and 100 are counted correctly. written and ordered correctly.	Numbers between 0 and 1000 are ordered correctly.
			• Given a number, identify one more and one less.	What number comes next or before, with numbers 0–10, is identified, with reminders where necessary.	One more and one less than a given number are identified.	One more and one less than a given number are identified without support, even when using negative integers.
2	To Know and use numbers	• Counting	• Count in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forward and backward.	With concrete objects, there is counting forwards from 0, in steps of 2, 5 and 10.	When reminders are provided, there is counting in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forwards or backwards.	There is independent counting in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forwards and backwards.
		• Representing	• Identify, represent and estimate numbers using different representations, including the number line.	Work is represented with objects or pictures and with the support of a teacher and the use of the number line.	Generally, numbers are identified, represented and estimated using different representations.	Independently, numbers are identified, represented and estimated using different representations.
			• Read and write numbers initially from 1 to 20 and then to at least 100 in numerals and in words.	Numbers from 1 to 20 are read and written correctly in numerals and words.	Numbers from 1 to 100 are generally read and written correctly in numerals and words.	Numbers from 1 to 100 are read and written correctly in numerals and words without support.
3	To Know and use numbers	• Comparing	• Use the language of: equal to, more than, less than (fewer), most and least.	The language how many altogether, how many hidden, how many left, more than and less than is understood.	The language of equal to, more than, less than, most and least is generally used correctly.	The language of equal to, more than, less than, fewer, most and least is used correctly and independently.
			• Compare and order numbers from 0 up to 100; use <, > and = signs.	Numbers 1–10 can be placed in ascending order.	Generally, numbers between 0 and 100 are ordered correctly.	Numbers between 0 and 1000 are ordered correctly.

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				With support, the first, second, etc. in a line can be pointed at.	The signs <, > and = are used to compare numbers from 0 up to 100.	The signs <, > and = are used to compare numbers from 0 up to 1000 independently.
4	To Know and use numbers	Place value	Recognise the place value of each digit in a two- digit number (tens, ones).	When guidance or prompts are given, the place value of each digit in a two- digit number is recognised.	The place value of each digit in a two- digit number is recognised. Generally, the place value of each digit in a two- digit number is recognised.	The place value of each digit in a two- digit number is recognised without support.
		Solving problems	• Use place value and number facts to solve problems.	Mathematical activities involving sorting, counting and measuring are accessed with support. With the support of a teacher, place value and number facts are used to solve problems.	When reminders are provided, place value and number facts are used to solve problems. Generally, the starting point in a problem is found.	Place value and number facts are used to solve problems. The starting point in a problem is found independently.
5	To Add and Subtract	• Complexity	• Solve one-step problems with addition and subtraction: • Using concrete objects and pictorial representations including those involving numbers, quantities and measures. • Using the addition (+), subtraction (-) and equals (=) signs.	The symbols + and = are used to record additions. The symbols – and = are used to record subtractions. Addition and subtraction problems, involving up to 10 objects, are solved with prompts. Using concrete objects and pictorial representations (including those involving numbers, quantities and measures) onestep addition and subtraction problems are solved. With the support of a teacher, more complicated one- step problems with addition and subtraction can be answered.	Generally, one- step problems with addition and subtraction (including those involving numbers, quantities and measures) are solved. The addition (+), subtraction (-) and equals (=) signs are understood and generally used correctly.	One- step problems with addition and subtraction are solved independently. Two- step problems involving addition and subtraction are tackled and solved without support. The addition (+), subtraction (-) and equals (=) signs are used correctly and independently.
6	To Add and Subtract	• Complexity	• Applying their increasing knowledge of mental and written methods.			
		• Methods	• One-digit and two-digit numbers to	Work is recorded with objects,	Generally, two- digit and one-	Using concrete objects, pictorial

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			20, including zero.	pictures or diagrams. With prompts, numbers of objects to 10 are added and subtracted. One- digit and two- digit numbers to 20 and a two- digit number and ones are added and subtracted (using concrete objects, pictorial representations and mentally) when help and support is provided.	digit numbers can be added and subtracted independently. A two- digit number and tens, two two- digit numbers and three one-digit numbers are added and subtracted (using concrete objects, pictorial representations and mentally) when reminders are provided.	representations and mentally, the following are added and subtracted independently: - One- digit and two- digit numbers to 20, including zero - A two- digit number and ones - A two- digit number and tens - Two two- digit numbers Three one- digit numbers are added mentally.
7	To Add and Subtract	• Methods	• A two-digit number and ones.			
			• A two-digit number and tens.			
8	To Add and Subtract	Methods	• Two two-digit numbers.			
			• Adding three one-digit numbers.			
			• Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	With support there is an awareness that the addition of numbers can be done in any order and that the subtraction of one number from another cannot.	Generally, there is an understanding that two numbers can be added in any order but subtraction of one number from another cannot.	An understanding that two numbers can be added in any order but subtraction of one number from another cannot is secured.
9	To Add and Subtract	Checking	• Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	There is an awareness of the terminology 'addition' and 'subtraction'. Addition is understood as finding the total of two or more sets of objects. Subtraction is understood as 'taking away' objects and seeing how many are left. With support, simple addition or subtraction problems can be solved.	When prompts are provided, the inverse relationship between addition and subtraction is used in calculations to check for correct answers. The subtraction facts linked to addition facts are recognised and calculated.	Number problems are solved and answers are checked independently by using the inverse relationship between addition and subtraction. Missing number problems are solved independently by using the inverse relationship between addition and subtraction.
		Using number facts	• Represent and use number bonds and related subtraction facts within 20.	When guidance is provided, number bonds and subtraction facts to 20 are represented and used.	With some reminders addition and subtraction facts to 20 are fluently used and number bonds within 20 are represented and used.	Addition and subtraction facts to 1000 are fluently used and recalled.
			• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	Number bonds and addition and subtraction facts to 20 are used and recalled, with reminders or prompts when needed.	Addition and subtraction facts to 20 are recalled fluently.	Addition and subtraction facts to 100 are recalled fluently and independently.
10	To multiply and divide	• Complexity	• Solve one-step problems involving multiplication and division by calculating the answer using concrete objects,	With the support of a teacher, concrete objects, pictorial representations and arrays, one-step problems involving	When reminders are provided and with the use of arrays if necessary, one- step problems involving multiplication and divisions are	One- step problems, involving multiplication and division, are solved independently and accurately.

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			pictorial representations and arrays with the support of the teacher.	multiplication and division are solved.	solved.	Using concrete objects, pictorial representations and arrays independently to support, twostep problems, involving multiplication and division, are solved accurately.
		• Methods	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (.), division (÷) and equals (=) signs.	There is an awareness of the operations multiplication and division. There is an awareness of the signs x, ÷, = and what they represent.	Generally, calculations involving multiplication and division are completed accurately. Generally, the signs x, ÷, = are used correctly.	Independently, mathematical statements for multiplication and division are calculated and the signs x, ÷, = are used correctly.
			• Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	There is an awareness that multiplication of two numbers may be done in any order and division of one number by another cannot.	Generally, an understanding that multiplication of two numbers can be done in any order and division of one number by another cannot is shown.	There is a secure understanding that multiplication of two numbers can be done in any order and division of one number by another cannot.
11	To multiply and divide	Methods	• Solve problems involving multiplication and division using mental methods	Simple multiplication and division problems, deriving from the 2, 5 and 10 multiplication tables, are solved mentally, with reminders if necessary.	Mental methods are developing in order to solve multiplication and division problems.	Mental calculations can be recorded as number sentences and problems involving multiplication and division, using mental methods, can be solved correctly and independently.
		Checking	• Use known multiplication facts to check the accuracy of calculations	With the support of a teacher, multiplication facts are used to check the accuracy of calculations.	Generally, multiplication facts are applied to check the accuracy of calculations.	Multiplication facts are applied independently to check the accuracy of calculations.
12	To multiply and divide	Using multiplication and division facts	• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.	When help or structure is provided, multiplication and division facts for the 2, 5 and 10 multiplication tables are used.	Multiplication and division facts for the 2, 5 and 10 multiplication tables are recalled and used independently, with support if necessary.	The recall and use of multiplication and division facts for the 2, 5 and 10 multiplication tables are fluently applied.
			• Recognise odd and even numbers.	With the support of a teacher, pictorial representations and concrete objects, odd and even numbers are recognised.	Generally, odd and even numbers are recognised.	Odd and even numbers are recognised without support.
			• Use multiplication and division facts to solve problems.	With the support of a teacher, pictorial representations and concrete objects, multiplication	Generally, problems are solved independently using multiplication and division facts.	Problems are solved independently using multiplication and division facts.

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				and division facts are used to solve problems.		
13	Fractions (including decimals, percentages, ratio and proportion)	Recognising fractions	• Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	With the support of a teacher, a half and a quarter are named and found by strategies such as: folding shapes in two or four, halving an even number of objects or being able to say when a container is half full.	1/2, 1/3, 1/4, 2/4 and 3/4 of an object, shape or quantity are recognised and named when prompts are given.	1/2, 1/3, 1/4, 2/4 and 3/4 of an object, shape or quantity are recognised and named independently.
			• Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	There is an emerging understanding that a quarter is one of four equal parts of an object, shape or quantity.	1/2, 1/3 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity are generally recognised, named and written.	1/2, 1/3, 1/4, 2/4 and 3/4 of a length or set of objects are recognised, named and written.
			• Recognise, find, name and write fractions 1/2, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.	With the support of a teacher and pictorial representations or concrete objects, 1/4, 2/4, 1/2, 1/3 and 3/4 of a length, shape, set of objects or quantity are recognised, found and named.	A group of objects can be split into halves and quarters independently.	A group of objects can be split into halves and quarters independently.
14	Fractions (including decimals, percentages, ratio and proportion)	Equivalence	• Recognise the equivalence of 2/4 and 1/2.	When concrete objects, pictorial representations and the support of a teacher are provided, the equivalence of 2/4 and 1/2 is recognised.	Generally, the equivalence of 2/4 and 1/2 is recognised as a decimal or percentage.	The equivalence of 2/4, 1/2 and harder fractions, such as 1/3, 2/3, 1/5, etc., is recognised without prompts.
		Solving problems	• Write simple fractions for example, 1/2 of 6 = 3.	With support, an understanding of a 1/2 and 1/4 of a given quantity is shown.	When reminders are provided, simple fractions are written, e.g. 1/2, 1/4 and 1/2 of 6 = 3.	More complicated fractions are written independently, e.g. finding 1/3, 1/6 and 1/5 and 1/3 of 12 = 4.
15	To understand the properties of shapes		• Recognise and name common 2D and 3D shapes.	With help, common 2- D and 3- D shapes are sorted and recognised.	Common 2- D and 3- D shapes are recognised from pictures of them.	Properties of 2- D and 3- D shapes are identified and described and the 2- D shape on the surface of a 3- D shape is identified.
			• Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.	Simple properties of 2- D shapes are described, such as side or corner. Through supported activity such as folding, there is an awareness of symmetry.	Generally 2- D shapes are described accurately, including their lines of symmetry.	2- D shapes are sorted and compared independently.

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			• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.	Simple properties of 3- D shapes are described, such as the number of faces.	Generally, 3- D shapes are described accurately, including the number of edges, vertices and faces.	3- D shapes are sorted and compared independently.
16	To understand the properties of shapes		• Identify 2-D shapes on the surface of 3-D shapes.	With support, 2- D faces on the surface of 3- D shapes are recognised.	Generally, 2- D faces on the surface of 3- D shapes are recognised and used to describe 3- D shapes.	2- D faces on the surface of 3D shapes are recognized independently and form part of independently created criteria for sorting.
			Compare and sort common 2-D and 3-D shapes and everyday objects.	Simple 2- D shapes on the surface of 3- D shapes are identified.	2- D and 3- D shapes and everyday objects are sorted using one criterion.	2- D and 3- D shapes are sorted using more than one criterion.
17	To describe position, direction and movement		• Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	Position and direction can be described with the support of a teacher. There is an awareness of the terms whole, half, quarter and three- quarter turns.	Generally, position, direction and movement can be described using the terms whole, half, quarter and three- quarter turns.	Independently, position, direction and movement can be described.
			• Order and arrange combinations of mathematical objects in patterns and sequences.	A simple pattern of objects, shapes or numbers is copied and continued with support, reminders or prompts.	Generally, combinations of mathematical objects in patterns and sequences are ordered correctly. Sequences in regular steps are	Combinations of mathematical objects in patterns and sequences are ordered and arranged correctly and independently.
			• Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	Generally, language such as behind, under, on top of, next to etc. is used and responded to. Generally, directional language such as forwards, backwards, turn, etc., is used and responded to.	Generally, the language half turns, quarter turns and whole turns is used to describe position, direction and movement. Reminders for the use of mathematical vocabulary to describe position, direction and movement are sometimes needed. Left and right are used correctly when directions are given.	Right angles in turns are recognised without support. The language half turns, quarter turns and whole turns is used to describe position, direction and movement independently. A good range of mathematical vocabulary to describe position, direction and movement is used. Left, right, clockwise and anticlockwise are used correctly when directions are given.
18	To use measures		• Compare, describe and solve practical problems for: •mass/weight.	With the support of a teacher, practical problems for a range of measures are described and solved.	Generally, practical problems for a range of measures, including lengths and heights, mass/weight, capacity, volume and time, are	Practical problems for a range of measures including lengths and heights, mass/weight, capacity, volume and time, are compared,

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					compared, described and solved.	described and solved without help.
19	To use measures		Compare, describe and solve practical problems for: • lengths and heights • Measure and begin to record: • lengths and heights.	With the support of a teacher, practical problems for a range of measures are described and solved. With help, a range of measures are measured in a variety of ways: - Lengths are compared and put into an order. Objects that are shorter/longer than 1m, heavier/lighter than 500g, hold more/less that 1 litre can be found.	Generally, practical problems for a range of measures, including lengths and heights, mass/weight, capacity, volume and time, are compared, described and solved. Generally, a range of measures are measured and recorded. Tools needed for measuring are chosen when prompted.	Practical problems for a range of measures including lengths and heights, mass/weight, capacity, volume and time, are compared, described and solved without help. A range of measures are measured and recorded independently. Tools needed for measuring are chosen independently.
20	To use measures		• Measure and begin to record: • capacity and volume.	With help, a range of measures are measured in a variety of ways: - Lengths are compared and put into an order. - Objects that are shorter/longer than 1m, heavier/lighter than 500g, hold more/less that 1 litre can be found.	Generally, a range of measures are measured and recorded. Tools needed for measuring are chosen when prompted.	A range of measures are measured and recorded independently. Tools needed for measuring are chosen independently.
21			• Measure and begin to record: time. (hours, minutes, seconds). Compare, describe and solve practical problems for • time.	With the support of a teacher, practical problems for a range of measures are described and solved. With help, a range of measures are measured in a variety of ways: - Lengths are compared and put into an order. Objects that are shorter/longer than 1m, heavier/lighter than 500g, hold more/less that 1 litre can be found.	Generally, practical problems for a range of measures, including lengths and heights, mass/weight, capacity, volume and time, are compared, described and solved. Generally, a range of measures are measured and recorded. Tools needed for measuring are chosen when prompted.	Practical problems for a range of measures including lengths and heights, mass/weight, capacity, volume and time, are compared, described and solved without help. A range of measures are measured and recorded independently. Tools needed for measuring are chosen independently.
22	To use measures		• Recognise and know the value of different denominations of coins and notes.	With concrete objects and pictorial representations, the value of different denominations of coins and notes is generally	The value of different denominations of coins and notes is recognised.	The value of different denominations of coins and notes is recognised and used to solve problems without support.

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				recognised.		
			• Sequence events in chronological order using language.	With prompts or support, events can be sequenced in chronological order, using language such as first, second, last, etc.	Events can be sequenced in chronological order, using language such as: first, second, last.	Events can be sequenced in chronological order, using language such as first, second, last, and questions about the timings of these events can be answered and asked independently.
			• Recognise and use language relating to dates, including days of the week, weeks, months and years.	Language for the days of the week is used and language for months and years is emerging.	Language relating to dates, including days of the week, weeks, months and years, is generally used correctly.	Language relating to dates, including days of the week, weeks, months, years and decades is used independently.
23/24	To use measures		• Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	With support, the time is read to the hour and there is an emerging understanding of the half hour. With the support of a teacher, the hands on a clock face are drawn to represent the time to the hour.	The number of minutes in an hour and the number of hours in a day is known and generally used to solve problems. Generally, time to the hour, half past the hour and quarter past/to the hour is told and the hands on a clock face to show these times are drawn. With prompts, intervals of time can be compared and sequenced independently. With reminders, time to five minutes can be told and the hands on a clock face drawn to show these times.	The number of minutes in an hour and the number of hours in a day is known and used to solve problems independently. Time to the hour, half past the hour, quarter to and quarter past the hour and to five minutes is told and the hands on a clock face to show these times are drawn independently. Intervals of time can be compared and sequenced independently.
			• Use standard units to estimate and measure length/height (m/cm), mass (kg/g), temperature (° C) and capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.	With the support of a teacher and practical measuring apparatus, such as rulers, scales, thermometers and measuring vessels, the following can be measured as accurately as possible: - length/height in cm/m	Generally, by using measuring apparatus, such as rulers, scales, thermometers and measuring vessels, the following can be measure to the nearest appropriate unit: - length/height in cm/m - mass in kg/g -	By using measuring apparatus, such as rulers, scales, thermometers and measuring vessels, the following can be measure to the nearest appropriate unit: - length/height in mm/cm/m - mass in kg/g -

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				- mass in kg/g - temperature in ° C - capacity in ml/l .	temperature in ° C - capacity in ml/l.	temperature in ° C - capacity in ml/l.
			• Compare and order lengths, mass, volume/capacity and record the results using >, < and =.	With the support of a teacher, the signs <, > and = are understood and used to order lengths, mass and volume/capacity.	Generally, the signs <, > and = are used to compare and order lengths, mass and volume/capacity.	The signs <, > and = are used to compare and order lengths, mass and volume/capacity independently.
25/26	To use measures		• Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	The symbols £ (pounds) and p (pence) are recognised and, with the support of a teacher, used.	Generally, the symbols £ (pounds) and p (pence) are recognised and used and combined to make particular values. It is understood that there are 100p in £1.	The symbols £ (pounds) and p (pence) are recognised, used and combined to make particular values. It is securely understood that there are 100p in £1 and this knowledge can be used to convert pence into pounds and pence.
			• Find different combinations of coins that equal the same amounts of money	With the support of a teacher different combinations of coins that equal the same amount of money are found.	Generally, combinations of coins that equal the same amounts of money are found.	Combinations of coins that equal the same amount of money are found without support.
			• Solve simple problems unit, in a practical context involving addition and subtraction of money of the same including giving change.	With the support of a teacher and concrete objects, simple addition and subtraction problems involving money of the same unit are solved. With the support of a teacher and concrete objects, change can also be given.	Simple addition and subtraction problems involving money of the same unit and giving change are solved independently – concrete objects may be needed for this.	More complicated addition and subtraction problems involving pounds and pence and giving change, are solved independently.
27/28	To use measures		• Compare and sequence intervals of time.			
			• Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock			

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			face to show these times.			
			• Know the number of minutes in an hour and the number of hours in a day.			
29/30	To use statistics		• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.	Simple pictograms, tally charts, block diagrams and tables are constructed with support.	When reminders are provided, simple pictograms, tally charts, block diagrams and simple tables are constructed.	Pictograms, tally charts, block diagrams and simple tables are constructed and interpreted independently.
			• Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.	Sorting takes place, using one or two simple criteria, such as boy/girl. Objects can be sorted into a given largescale Venn or Carroll diagram with support. Objects and pictures are used to create simple block diagrams and pictograms with support.	Generally, questions about totalling and comparing categorical data are answered correctly. Data can be collected and sorted to test a simple question. Vocabulary such as sort, group, set, table, most common and least popular is understood.	Questions about totalling and comparing categorical data are asked and answered accurately and without support. Questions about any information gathered can be asked for other children to answer. Venn and Carroll diagrams are used to sort and record information independently.
			• Ask and answer questions about totalling and comparing categorical data.	When help is provided, simple questions are answered and asked by counting the number of objects in each category and sorting the categories by quantity. There is talk about totalling and 'which set has the most'. and how work has been represented when reminders are given.	Generally, questions about results that have been gathered can be answered. There is talk about totalling and 'which set has the most', and how work has been represented when reminders are given.	Responding to more complex questions, such as 'How many people took part in this survey?' are answered.
31	To use algebra		• Solve addition and subtraction problems involving missing numbers.	With the support of a teacher, addition and subtraction problems involving missing numbers are solved.	When reminders are given, addition and subtraction problems, involving missing numbers, are solved.	More complex addition and subtraction problems, involving missing numbers, are solved independently and accurately.