

# Entry Level Maths Number - Medium Term Overview

<b>Entry Level 1</b>					
<b>Small Steps</b>					
<p><b><u>Number: Number and Place value</u></b></p> <p>Write and order whole numbers up to 20. Interpret different numbering formats, including Roman, Arabic, tally and word. Understand and use the vocabulary associated with the comparison of number such as how many, the same as, more, less, less than, greater than, fewer</p> <p>Use appropriate objects or number line to add single-digit numbers up to 20.</p> <p>Recognise the odd and even numbers from 1 to 20.</p> <p>Understand and use place value to order 1 significant figure integer numbers up to 100 e.g. order 70, 6, 20.</p> <p>Round numbers, less than ten, to the nearest whole number. Use approximations in calculations.</p> <p>Use the terms first, second, third, fourth, fifth including sequencing events.</p>	<p><b><u>Counting, recognising and comparing numbers 0 - 10</u></b></p> <ul style="list-style-type: none"> <li>Counting forwards and backwards within 10</li> <li>Counting objects within ten</li> <li>Counting different groups</li> <li>Representing counting songs</li> <li>Anything can be counted</li> <li>Subitising numbers to five</li> <li>Conservation</li> <li>Using numerals</li> <li>Introducing zero</li> <li>Ordinal numbers</li> <li>Ordering numbers to 10</li> <li>More than and fewer than</li> <li>One more with manipulatives and counting</li> <li>One less with manipulatives and counting</li> <li>Finding the missing numbers</li> </ul>	<p><b><u>Counting to and from 20</u></b></p> <ul style="list-style-type: none"> <li>Counting to and from 20</li> <li>Counting on</li> <li>Counting back from 20</li> <li>Counting forward to 20 and back from 20</li> <li>Comparing numbers to 20</li> <li>Ordering numbers 11- 20 practically</li> <li>Comparing and ordering numbers 0-20 practically</li> <li>Finding one more and one less using representations</li> <li>Finding one more and one less with manipulatives and images</li> <li>Finding the missing number from 0 to 20</li> <li>Order and sort base-ten number boards into odd and even sets</li> <li>Skip count in odds and evens</li> <li>Explain what odd and even numbers are and the difference between them</li> <li>Explain how even and odd numbers can be partitioned</li> </ul>	<p><b><u>Counting in tens - decade numbers</u></b></p> <ul style="list-style-type: none"> <li>Counting forwards and backwards in 10s to 50</li> <li>Counting forwards and backwards in 10s to 100</li> <li>Composition of decade numbers to 100: making groups of 10</li> <li>Count groups of 10 in decade numbers</li> <li>Order and compare decade numbers on number tracks</li> </ul>	<p><b><u>Pattern in counting from 20 to 100</u></b></p> <ul style="list-style-type: none"> <li>Counting patterns within a decade</li> <li>Crossing the tens boundary counting forwards</li> <li>Crossing the tens boundary counting backwards</li> <li>Crossing the tens boundary counting forwards and backwards</li> <li>Find missing numbers between 20 and 100</li> </ul>	<p><b><u>Composition of numbers 11 to 19</u></b></p> <ul style="list-style-type: none"> <li>Explain that the digits in the numbers 11 to 19 express quantity</li> <li>Explain that the digits in the numbers 11 to 19 express position on a number line</li> <li>Identify the quantity shown in a representation of numbers 11 to 19</li> <li>Use knowledge of 10 and a bit to solve problems</li> <li>Solve problems using knowledge of 10 and a bit in different contexts</li> <li>Explore odd and even numbers within 20</li> <li>Double the numbers 6 to 9 and halve the result explaining what doubling and halving is</li> <li>Use knowledge of addition facts within 10 to add within 20</li> <li>Use knowledge of subtraction facts within 10 to subtract within 20</li> <li>Use knowledge of addition and subtraction facts within 10 to add and subtract within 20</li> </ul>
<p><b><u>Number: Addition and Subtraction</u></b></p> <p>Understand vocabulary associated with numerical calculations such as add, subtract, plus, minus, take away, double, +, - .</p>	<p><b><u>Composition of numbers 0 to 5</u></b></p> <ul style="list-style-type: none"> <li>Explain that numbers can represent how many objects there are in a set</li> <li>Explain that ordinal numbers show a position and not a set of objects</li> <li>Partition numbers one to five in different ways</li> </ul>	<p><b><u>Composition of numbers 6 to 10</u></b></p> <ul style="list-style-type: none"> <li>Count a set of objects and match the spoken number to the written numeral and number name</li> <li>Represent the numbers 6 to 10 using a five and a bit structure</li> <li>Compare two numbers and say which is larger or smaller</li> </ul>	<p><b><u>Additive structures: addition</u></b></p> <ul style="list-style-type: none"> <li>Combine two or more parts to make a whole</li> <li>Explain that addends can be represented in any order</li> <li>Explain that the = sign can be used to show that the whole and the sum of the parts are equal</li> <li>Add parts to find the value of the whole and write the equation</li> </ul>	<p><b><u>Additive structures: addition and subtraction</u></b></p> <ul style="list-style-type: none"> <li>Partition a whole into two parts and express this with a subtraction equation</li> <li>Solve problems by partitioning a whole into two parts and express this with a subtraction equation</li> <li>Represent first then now stories with subtraction equations</li> </ul>	<p><b><u>Addition and subtraction facts within 10</u></b></p> <ul style="list-style-type: none"> <li>Explain that addition is commutative</li> <li>Find pairs of numbers to 10</li> <li>Solve problems by finding pairs of numbers to 10</li> <li>Add and subtract 1 from any number</li> </ul>

Use skills ladders for assessment

## Entry Level Maths Number - Medium Term Overview

<p><b>Use appropriate objects or number line to add single-digit numbers up to 20.</b></p> <p><b>Use appropriate objects or number line to subtract a single-digit number from a starting value no greater than 20.</b></p> <p><b>Know and use addition and subtraction as inverse operations.</b></p> <p><b>Solve simple proportion problems by repeated addition of constituent quantities e.g. if 1 cake costs.</b></p> <p><b>Complete a sequence increasing by 2, given in words, numbers or as a spatial pattern.</b></p>	<ul style="list-style-type: none"> <li>Partition the numbers one to five in a systematic way</li> <li>Find a missing part when one part and the whole is known</li> <li>Solve problems finding a missing part when one part and the whole is known</li> <li>Show one more and one less than a number using representations</li> <li>Show one more and one less than a number using representations and describe this accurately</li> <li>Use a bar model to represent a whole partitioned into two parts</li> <li>Solve problems using a bar model to represent a whole partitioned into two parts</li> </ul>	<ul style="list-style-type: none"> <li>Identify the whole and parts of the numbers 6 to 10 using the five and a bit structure</li> <li>Explore the numbers 6 to 10 using the part whole model</li> <li>Explain where 6, 7, 8 and 9 lie on a number line</li> <li>Estimate where 6, 7, 8 and 9 lie on an unmarked number line</li> <li>Order and sort base-ten number boards into odd and even sets</li> <li>Skip count in odds and evens</li> <li>Explain what odd and even numbers are and the difference between them</li> <li>Explain how even and odd numbers can be partitioned</li> <li>Partition numbers 6 to 10 in different ways</li> <li>Partition the numbers 6 to 10 in a systematic way</li> <li>Identify a missing part when a whole is partitioned into two parts</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems by adding parts to find the value of the whole and write the equation</li> <li>Find the missing addend in an equation</li> <li>Solve problems by finding the missing addend in an equation</li> <li>Represent first then now stories with addition equations</li> <li>Solve problems by representing first then now stories with addition equations</li> <li>Make addition stories and write equations to match</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems by representing first then now stories with subtraction equations</li> <li>Represent different types of stories with subtraction calculations</li> <li>Make addition and subtraction stories writing equations to match</li> <li>Work out the missing part of an addition story and equation if the other two parts are known</li> <li>Work out the missing part of a subtraction story and equation if the other two parts are known</li> <li>Explain that addition and subtraction are inverse operations</li> <li>Use additive structures to think about addition and subtraction equations in different ways</li> </ul>	<ul style="list-style-type: none"> <li>Explain what the difference is between consecutive numbers using addition and subtraction</li> <li>Explain what happens when 2 is added to or subtracted from odd and even numbers</li> <li>Explain what the difference is between consecutive odd and even numbers</li> <li>Explain what happens when zero is added to or subtracted from a number</li> <li>Explain what happens when a number is added to or subtracted from itself</li> <li>Double numbers and explain what doubling means</li> <li>Halve numbers and explain what halving means</li> <li>Use knowledge of doubles and halves to calculate near doubles and halves</li> <li>Addition and subtraction facts within 10</li> <li>Use knowledge and strategies to add 5 and 3 and 6 and 3</li> </ul>
<p><b><u>Number: Multiplication and division</u></b></p> <p><b>Know and use multiplication of numbers up to 10 by 2. Understand and use the term 'double'</b></p> <p><b>Recognise the odd and even numbers from 1 to 20.</b></p>	<p><b><u>Multiplication and division</u></b></p> <ul style="list-style-type: none"> <li>Count efficiently in groups of two</li> <li>Count efficiently in groups of ten</li> <li>Count efficiently in groups of five</li> <li>Count efficiently by counting in groups of two five and ten</li> <li>Make equal groups</li> <li>Add equal groups</li> <li>Make arrays</li> <li>Make doubles</li> <li>Make equal groups – grouping</li> <li>Make equal groups - sharing</li> </ul>				
<p><b><u>Number: Fractions</u></b></p> <p><b>Give a number that is 0.5 more or less than a given single-digit number.</b></p> <p><b>Recognise half, quarter and three quarters in words, numbers and</b></p>	<p><b><u>Recognising Fractions</u></b></p> <ul style="list-style-type: none"> <li>Halving shapes or object</li> <li>Halving a quantity</li> <li>Find a quarter of a shape or object</li> <li>Find a quarter of a quantity</li> </ul>				

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<p>diagrams. Represent half, quarter and three quarters on diagrams.</p> <p>Understand percentage is 'number of parts per hundred'.</p> <p>Understand that 100% represents the whole quantity, 50% is equivalent to <math>\frac{1}{2}</math> and 25% is equivalent to <math>\frac{1}{4}</math>. Represent these percentages in diagrams.</p>					
<b>Key Vocab</b>					
<p>Equal to, more than, less than (fewer), most, least. Forward, backward. Numeral.</p> <p>More, less. Addition and Subtraction. Number bond. Multiply. Divide. Fraction. Halve, quarter.</p>					

## Entry Level Maths Number - Medium Term Overview

Entry Level 2					
<p><b><u>Number: Number and Place value</u></b></p> <p><b>Write, order and compare whole numbers up to 100. Know the value of each digit in a two-digit number.</b></p> <p><b>Understand and use place value to order 1 significant figure integer numbers up to 1000 e.g. order 400, 7, 50.</b></p> <p><b>Perform simple calculations where the units of the quantities are whole numbers of hundreds.</b></p> <p><b>Round numbers less than 100 to the nearest ten or whole number. Estimate totals using rounded values.</b></p>	<p><b><u>Composition of multiples of 10</u></b></p> <ul style="list-style-type: none"> <li>Explain that one ten is equivalent to ten ones</li> <li>Represent multiples of ten using their numerals</li> <li>Represent multiples of ten using their numerals and names</li> <li>Represent multiples of ten in an expression or an equation</li> <li>Estimate the position of multiples of ten on a 0 - 100 number line</li> <li>Explain what happens when you add and subtract ten to a multiple of ten</li> <li>Use knowledge of facts and unitising to add and subtract multiples of ten</li> <li>Add and subtract multiples of ten</li> <li>Solve problems involving multiples of ten</li> <li>Solve problems involving multiples of ten in a range of contexts</li> </ul>	<p><b><u>Counting and representing the numbers 20 to 99</u></b></p> <ul style="list-style-type: none"> <li>Review and explore the counting sequence for counting to 100 and beyond</li> <li>Count a large group of objects by counting groups of tens and the extra ones</li> <li>Count a large group of objects by using knowledge of unitising by counting tens and ones</li> <li>Represent a number from 20 - 99 in different ways</li> <li>Explain and mark the position of numbers 20 - 99 on a number line including the context of measure</li> </ul>	<p><b><u>Comparing, ordering and partitioning 2-digit numbers</u></b></p> <ul style="list-style-type: none"> <li>Compare two 2-digit numbers</li> <li>Partition 2-digit numbers into tens and ones using place value resources</li> <li>Partition 2-digit numbers into tens and ones and record in different ways</li> <li>Add two 2-digit numbers by partitioning into tens and ones</li> <li>Solve problems by adding two 2-digit numbers by partitioning into tens and ones</li> </ul>		
<p><b><u>Number: Addition and Subtraction</u></b></p> <p><b>Understand vocabulary associated with numerical calculations such as multiply, times, half, divide, <math>\times</math>, <math>\div</math>.</b></p> <p><b>Add whole numbers up to 100.</b></p> <p><b>Subtract a single-digit number from an initial value no greater than 100.</b></p> <p><b>Complete a sequence increasing or decreasing by 2, 3, 5 or 10.</b></p> <p><b>Use a simple one-step function machine to determine outputs for given inputs.</b></p> <p><b>Use a simple two-step function machine to determine outputs for given inputs.</b></p>	<p><b><u>Secure fluency of addition and subtraction facts within 10</u></b></p> <ul style="list-style-type: none"> <li>Represent addition and subtraction facts within 10</li> <li>Recall known addition and subtraction facts within 10</li> <li>Recall doubles within 10</li> <li>Use near doubles within 10</li> <li>Use known addition and subtraction facts within 10 to solve problems</li> </ul>	<p><b><u>Calculating within 20</u></b></p> <ul style="list-style-type: none"> <li>Add three addends</li> <li>Use a 'First, then, then, now' story to add three addends</li> <li>Explain that the addends can be added in any order</li> <li>Add three addends efficiently</li> <li>Add three addends efficiently by finding two addends that total 10</li> <li>Add two numbers that bridge through 10</li> <li>Subtract two numbers that bridge through 10</li> <li>Compare numbers and describe how many more or less there are in each set</li> <li>Calculate the difference</li> </ul>	<p><b><u>Adding and subtracting ones and tens to and from 2-digit numbers</u></b></p> <ul style="list-style-type: none"> <li>Add and subtract one to and from a 2-digit number</li> <li>Add and subtract one to and from a 2-digit number that crosses a tens boundary</li> <li>Use number facts to add a 1-digit number to a 2-digit number</li> <li>Use number facts to subtract a 1-digit number from a 2-digit number</li> <li>Use number bonds to 10 to add and subtract a 1-digit to and from a 2-digit number</li> <li>Use 'make 10' to add and subtract a 1-digit number to and from a 2-digit number</li> </ul>	<p><b><u>Addition and subtraction of two 2-digit numbers</u></b></p> <ul style="list-style-type: none"> <li>Explain different strategies used to add</li> <li>Add multiples of 10 and 1-digit numbers</li> <li>Add a 2-digit number to a 2-digit number when not crossing ten</li> <li>Add a 2-digit number to a 2-digit number when not crossing ten in different contexts</li> <li>Add a 2-digit number to a 2-digit number when crossing ten</li> <li>Add a 2-digit number to a 2-digit number when crossing ten in different contexts</li> </ul>	

Use skills ladders for assessment

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		<ul style="list-style-type: none"> <li>Calculate the difference in different contexts</li> <li>Explain what the difference is between consecutive numbers</li> <li>Calculate the difference when information is presented in a pictogram</li> <li>Calculate the difference when information is presented in a bar chart</li> <li>Use knowledge of subtraction to solve problems in a range of contexts</li> <li>Use knowledge of addition and subtraction to solve problems in a range of contexts</li> </ul>	<ul style="list-style-type: none"> <li>Find ten more or less than a 2-digit number</li> <li>Add and subtract ten to and from a 2-digit number and explain the patterns</li> <li>Use number facts to add or subtract a multiple of ten to and from a 2-digit number</li> <li>Use knowledge of adding and subtracting multiples of ten to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Explain different strategies used to subtract</li> <li>Subtract a 2-digit number from a 2-digit number</li> <li>Partition the subtrahend to help with subtraction</li> <li>Subtract a 2-digit number from a 2-digit number not crossing ten</li> <li>Subtract a 2-digit number from a 2-digit number not crossing ten in different contexts</li> <li>Subtract a 2-digit number from a 2-digit number crossing ten</li> <li>Subtract a 2-digit number from a 2-digit number crossing ten in different contexts</li> <li>Use knowledge of 2-digit number to subtract efficiently</li> <li>Add and subtract efficiently in a range of contexts</li> </ul>		
<p><b><u>Number: Multiplication and division</u></b></p> <p>Understand vocabulary associated with numerical calculations such as multiply, times, half, divide, <math>\times</math>, <math>\div</math>.</p> <p>Know and use multiplication and division as inverse operations.</p> <p>Know and use multiplication of numbers up to 10 by 3, 4, 5 and 10.</p> <p>Recognise when a two-digit number is divisible by 2, 3, 4, 5 and 10.</p> <p>Solve simple proportion problems by doubling constituent parts e.g. adapt a 4-person recipe for 8 people.</p>	<p><b><u>Grouping objects in different ways and relating to multiplication</u></b></p> <ul style="list-style-type: none"> <li>Explain that objects can be grouped in different ways</li> <li>Describe how objects have been grouped</li> <li>Represent equal groups as repeated addition</li> <li>Represent equal groups as repeated addition and multiplication</li> <li>Represent equal groups as multiplication</li> <li>Explain and represent multiplication when a group contains zero or one items</li> <li>Identify and explain each part of a</li> </ul>	<p><b><u>Representing counting in 2s and 10s as the 2 and 10 times tables</u></b></p> <ul style="list-style-type: none"> <li>Represent the 2 times table in different ways</li> <li>Use knowledge of the 2 times table to solve problems</li> <li>Explain the relationship between adjacent multiples of 2</li> <li>Explain that factor pairs can be written in any order</li> <li>Represent counting in tens as the 10 times table</li> <li>Represent the 10 times table in different ways</li> <li>Explain the relationship between</li> </ul>	<p><b><u>Representing counting in 5s as the 5 times table and link to the 10 times tables</u></b></p> <ul style="list-style-type: none"> <li>Explain how groups of five and ten are related</li> <li>Explain the relationship between multiples of five and ten</li> <li>Use knowledge of the relationships between the 5 and 10 times tables to solve problems</li> <li>Explain how a factor of zero or one affect the product</li> <li>Represent multiplication equations in different ways</li> </ul>	<p><b><u>Multiplying by 2, doubling and halving (factors and products)</u></b></p> <ul style="list-style-type: none"> <li>Double 2-digit numbers and record as multiplications where one of the factors is 2</li> <li>Explain how doubling and halving are related</li> <li>Explain the relationship between factors and products</li> <li>Halve 2-digit numbers</li> <li>Use knowledge of doubling, halving and the 2 times table to solve problems</li> </ul>	<p><b><u>Introduction to division structures</u></b></p> <ul style="list-style-type: none"> <li>Explain that objects can be grouped equally</li> <li>Identify and explain when objects cannot be grouped equally</li> <li>Explain the relationship between division expressions and division stories</li> <li>Calculate the number of equal groups in a division story</li> <li>Use knowledge of skip counting and division to solve problems relating to measure</li> <li>Skip count using the divisor to find the quotient</li> </ul>	<p><b><u>Doubling, halving, quotative and partitive division</u></b></p> <ul style="list-style-type: none"> <li>Identify the patterns and relationships between the 5 and 10 times tables</li> <li>Identify and explain relationships between the 5 and 10 times tables</li> <li>Use knowledge of the 5 and 10 times tables to solve problems</li> <li>Use knowledge of the 5 and 10 times tables to solve problems in a range of contexts</li> <li>Explain how times table facts can help to find the quotient (10 times table)</li> <li>Explain how times table facts can help</li> </ul>

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<p><b>Use a simple one-step function machine to determine outputs for given inputs.</b></p> <p><b>Complete sequences of increasing or decreasing integers where the common difference is less than 10 or a multiple of 10.</b></p> <p><b>Substitute positive integers into a formula given in words and calculate answers i.e. average speed is distance travelled divided by time taken.</b></p> <p><b>Use a simple two-step function machine to determine outputs for given inputs.</b></p>	<p>multiplication equation</p> <ul style="list-style-type: none"> <li>• Use knowledge of multiplication to calculate the product</li> <li>• Use knowledge of multiplication to solve problems</li> <li>• Use knowledge of multiplication to solve problems in a range of contexts</li> </ul>	<p>adjacent multiples of 10</p> <ul style="list-style-type: none"> <li>• Represent counting in fives as the 5 times table</li> <li>• Represent the 5 times table in different ways</li> <li>• Explain the relationship between adjacent multiples of 5</li> </ul>	<ul style="list-style-type: none"> <li>• Use knowledge of the 2, 5 and 10 times tables to solve problems</li> <li>• Use knowledge of the 2, 5 and 10 times tables to solve problems in a range of contexts</li> <li>• Explain what each factor represents in a multiplication story</li> <li>• Explain what each factor represents in a multiplication story when one of the factors is one</li> <li>• Explain how a multiplication equation with 2 as a factor is related to doubling</li> </ul>		<ul style="list-style-type: none"> <li>• Explain that objects can be shared equally</li> <li>• Use skip counting to solve a sharing problem</li> <li>• Skip count using the divisor to find the quotient in a sharing problem</li> </ul> <p>Solve a variety of division problems, explaining understanding</p>	<p>to find the quotient (5 times table)</p> <ul style="list-style-type: none"> <li>• Explain how times table facts can help to find the quotient (2 times table)</li> <li>• Explain how a division equation with 2 as a divisor is related to halving</li> <li>• Explain each part of a division equation and know how they can be interchanged</li> <li>• Use knowledge of divisibility rules when the divisor is 2 to solve problems</li> <li>• Use knowledge of divisibility rules when the divisor is 10 to solve problems</li> <li>• Use knowledge of divisibility rules when the divisor is 5 to solve problems</li> <li>• Explain how a dividend of zero affects the quotient</li> <li>• Explain how the quotient is affected when the divisor is equal to the dividend</li> <li>• Explain how a divisor of one affects the quotient</li> </ul>
<p><b><u>Number: Fractions</u></b></p> <p><b>Give a number that is 0.1 more or less than a single-digit number including where a zero may not be given after the decimal point i.e. <math>8 - 0.1 = 7.9</math>.</b></p> <p><b>Recognise that two halves, four quarters or ten tenths make one whole and that five tenths and one half are equivalent. Represent equivalence in diagrams.</b></p> <p><b>Calculate one half, one quarter or one tenth of a quantity, where the answer is an integer.</b></p>	<p><b><u>Fractions: identify equal parts and be familiar with halves, thirds and quarters</u></b></p> <ul style="list-style-type: none"> <li>• Identify if something has been split into equal or unequal parts</li> <li>• Name the fraction 'one half' in relation to a fraction of a length, shape or set of objects</li> <li>• Name the fraction 'one quarter' in relation to a fraction of a length, shape or set of objects</li> <li>• Name the fraction 'one third' in relation to a fraction of a length, shape or set of objects</li> </ul>					

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<p>Order single-digit decimals.</p> <p>Understand that 10% is equivalent to dividing by ten.</p> <p>Find 50%, 25% and 10% of two-digit numbers, limited to results which are whole number answers.</p>	<ul style="list-style-type: none"><li>• Read and write the fraction notation <math>1/2, 1/3, 1/4</math> and relate this to a fractions of objects and sets</li><li>• Find half of a number</li><li>• Relate finding half of a number to halving</li><li>• Find <math>1/3</math> or <math>1/4</math> of a number</li><li>• Find <math>1/4</math> and <math>3/4</math> of an object, shape, set of objects, length or quantity</li><li>• Recognise the equivalence of <math>2/4</math> and <math>1/2</math></li></ul>					
<b>Key Vocab</b>						

## Entry Level Maths Number - Medium Term Overview

Entry Level 3					
<p><b><u>Number: Number and Place value</u></b></p> <p><b>Write, order and compare whole numbers up to 1000. Know the value of each digit in a three-digit number.</b></p> <p><b>Understand and use place value to order 2 significant figure integer numbers up to 1000 e.g. 580, 120, 91.</b></p> <p><b>Understand and use place value to order numbers given to 2 decimal places. Use decimal values in real life contexts i.e. money.</b></p> <p><b>Perform simple calculations where the units of the quantities are whole numbers of thousands or millions.</b></p> <p><b>Round numbers to the nearest whole multiple of ten. Use approximate values to obtain an estimation.</b></p>	<p><b><u>Securing place value to 100 and applying to addition and subtraction</u></b></p> <ul style="list-style-type: none"> <li>Composition of 100 in 10s and 1s</li> <li>Composition of 100 in 50s, 25s and 20s</li> <li>Multiples of 10 that total 100</li> <li>Use known facts to find pairs of numbers that total 100</li> <li>Use known facts to find complements to 100 efficiently</li> <li>Represent 3-digit multiples of 10 in different ways</li> <li>Use place value knowledge to write addition and subtraction equations</li> <li>Bridge 100 by adding in multiples of 10</li> <li>Bridge 100 by subtracting in multiples of 10</li> <li>Solve problems using knowledge of addition and subtraction of multiples of 10</li> </ul>	<p><b><u>Bridging 100: counting on and back in 10s, adding/subtracting multiples of 10</u></b></p> <ul style="list-style-type: none"> <li>Count across and on from 100</li> <li>Represent a 3-digit number up to 199 in different ways</li> <li>Bridge 100 by adding or subtracting a single-digit number</li> <li>Find 10 more or 10 less than a given number</li> <li>Cross the hundreds boundary when adding and subtracting any 2-digit multiple of 10</li> </ul>	<p><b><u>Representing 3-digit numbers, comparing and positioning on number lines</u></b></p> <ul style="list-style-type: none"> <li>Represent a 3-digit number up to 1000 in different ways</li> <li>Use knowledge of addition to solve problems</li> <li>Position 3-digit numbers on number lines</li> <li>Estimate the position of 3-digit numbers on unmarked number lines</li> <li>Comparing and ordering numbers with 1, 2 and 3 digits</li> <li>Ordering sets of 3-digit numbers</li> <li>Use known facts to add and subtract multiples of 100 within 1000</li> <li>Write a 3-digit multiple of 10 as a multiplication equation</li> <li>Partition 3-digit numbers in different ways</li> <li>Use known facts to solve problems involving partitioning numbers</li> <li>Use known facts to add and subtract to and from multiples of 100</li> <li>Add and subtract to and from a 3-digit number bridging 100</li> <li>Solve problems by adding and subtracting to or from 3-digit numbers</li> <li>Count forwards and backwards in multiples of 2, 20, 5, 50 and 25</li> <li>Solve problems by counting forwards and backwards in multiples of 2, 20, 5, 50 and 25</li> </ul>		
<p><b><u>Number: Addition and Subtraction</u></b></p> <p><b>Understand vocabulary associated with numerical calculations such as sum, difference, share, total, twice, triple.</b></p> <p><b>Add whole numbers up to 1000.</b></p> <p><b>Subtract whole numbers from an initial value no greater than 1000.</b></p>	<p><b><u>Review strategies for adding and subtracting across 10</u></b></p> <ul style="list-style-type: none"> <li>Add 3 numbers together using doubles and near doubles</li> <li>Add 3 numbers together in different contexts</li> <li>Numbers can be added in any order</li> <li>Add three addends by finding pairs that total 10</li> <li>Add three addends efficiently using a range of strategies</li> <li>Addition by bridging through 10</li> <li>Subtracting small numbers</li> </ul>	<p><b><u>Informal and mental strategies for adding and subtracting two 3-digit numbers</u></b></p> <ul style="list-style-type: none"> <li>Add two 3-digit numbers using partitioning</li> <li>Add two 3-digit numbers using adjusting strategies</li> <li>Add 2 and 3-digit numbers by redistributing</li> <li>Choose the most efficient strategy to add two 3-digit numbers</li> <li>Subtract 2 or 3-digit numbers using partitioning and bridging a multiple of 10</li> </ul>	<p><b><u>Column Addition</u></b></p> <ul style="list-style-type: none"> <li>Identify the addends and the sum in column addition</li> <li>Use knowledge of place value to correctly lay out column addition</li> <li>Add a pair of 2-digit numbers using column addition</li> <li>Add using column addition</li> <li>Use knowledge of column addition to solve problems</li> <li>Add a pair of 2-digit numbers using column addition with regrouping in the ones column</li> <li>Add a pair of 2-digit numbers using column addition with regrouping in the tens column</li> </ul>	<p><b><u>Column subtraction</u></b></p> <ul style="list-style-type: none"> <li>Identify the minuend and subtrahend in column subtraction</li> <li>Explain what is happening when you use column subtraction</li> <li>Subtract from a 2-digit number using column subtraction with exchanging from tens to ones</li> <li>Subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens</li> <li>Evaluate the efficiency of different subtraction strategies including column subtraction</li> </ul>	<p><b><u>Understand additive relationships and apply them to rearrange equations</u></b></p> <ul style="list-style-type: none"> <li>Understand why the order of addition and subtraction steps in a multi-step problem can be chosen</li> <li>Solve multi-step problems efficiently using addition and subtraction</li> <li>Understand the relationship between addition and subtraction equations with 2 and 3 digits</li> <li>Use knowledge of the additive relationship to rearrange addition equations</li> </ul>

**Use skills ladders for assessment**



## Entry Level Maths Number - Medium Term Overview

	<ul style="list-style-type: none"> <li>Subtracting to and from 10</li> <li>Subtracting numbers that bridge through 10</li> <li>Solving problems involving addition and subtraction</li> </ul>	<ul style="list-style-type: none"> <li>Subtract a pair of 2-digit numbers by finding the difference</li> <li>Subtract 3-digit multiples of 10 by finding the difference between them</li> <li>Choose the most efficient strategy to subtract from a 3-digit number</li> <li>Use addition and subtraction to solve problems involving bar charts, pictograms and tables</li> <li>Use addition and subtraction to solve problems in different contexts</li> </ul>	<ul style="list-style-type: none"> <li>Add using column addition with regrouping</li> <li>Use known facts and strategies to accurately and efficiently calculate and check column addition</li> <li>Use knowledge of column addition with regrouping to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Use knowledge of the additive relationship to rearrange subtraction equations</li> <li>Use knowledge of the additive relationship to identify knowns and unknowns in addition equations</li> <li>Use knowledge of the additive relationship to identify knowns and unknowns in subtraction equations</li> <li>Use knowledge of the additive relationship to rearrange equations before solving</li> <li>Solve one and two-step problems using information in scaled bar charts, pictograms and tables</li> <li>Solve one and two-step problems in different contexts</li> </ul>
<p><b><u>Number: Multiplication and division</u></b></p> <p><b>Understand vocabulary associated with numerical calculations such as sum, difference, share, total, twice, triple.</b></p> <p><b>Know and use multiplication of whole numbers up to <math>12 \times 12</math>, and use this knowledge in multiplication and division problems.</b></p> <p><b>Know and use multiplication of whole numbers up to <math>12 \times 12</math>, and use this knowledge in multiplication and division problems.</b></p> <p><b>Understand the index notation for squared and cubed and be able to calculate the results of squared and cubed powers on the numbers 1–5 and 10.</b></p> <p><b>Solve simple proportion problems using systematic analysis e.g. adapt a 2-person recipe for 1 person, 3 people, 20 people, etc.</b></p> <p><b>Solve simple inverse proportion problems using systematic analysis e.g. if speed doubles then the time taken will halve.</b></p>	<p><b><u>2, 4 and 8 times tables: using times tables to solve problems</u></b></p> <ul style="list-style-type: none"> <li>Represent counting in fours as the 4 times table</li> <li>Use knowledge of the 4 times table to solve problems</li> <li>Explain the relationship between adjacent multiples of four</li> <li>Explain the relationship between multiples of 2 and multiples of 4</li> <li>Use knowledge of the relationship between the 2 and 4 times tables to solve problems</li> <li>Represent counting in eights as the 8 times table</li> <li>Explain the relationship between adjacent multiples of eight</li> <li>Explain the relationship between multiples of 4 and multiples of 8</li> <li>Use knowledge of the relationship between the 4 and 8 times tables to solve problems</li> <li>Explain the relationship between the multiples of 2, 4 and 8</li> <li>Use knowledge of the relationship between the 2, 4 and 8 times tables to solve problems</li> <li>Use knowledge of the divisibility rules for divisors of 2 and 4 to solve problems</li> <li>Use knowledge of the divisibility rules for divisors 8 to solve problems</li> <li>Scale known multiplication facts by 10</li> <li>Scale divisions derived from multiplication facts by 10</li> </ul>			

## Entry Level Maths Number - Medium Term Overview

<p><b><u>Number: Fractions</u></b></p> <p><b>Add and subtract decimals in context i.e. money, mensuration, etc.</b></p> <p><b>Recognise equivalent fractions, including fractional quantities greater than 1. Understand and use mixed fraction and vulgar ('top heavy') fraction notation.</b></p> <p><b>Calculate thirds, quarters, fifths and tenths of quantities where the answer is an integer. Use fractions in context.</b></p> <p><b>Order decimals and fractions.</b></p> <p><b>Recognise equivalent fraction, decimal and percentage notation.</b></p> <p><b>Understand that 1% is equivalent to dividing by 100.</b></p> <p><b>Find 1%, 25%, 50% for three-digit numbers, limited to results which are whole number answers. Find other percentage quantities by combining results.</b></p>	<p><b><u>Unit fractions as part of a whole</u></b></p> <ul style="list-style-type: none"> <li>Identify a whole and the parts that make it up</li> <li>Explain why a part can only be defined in relation to a whole</li> <li>Identify the number of equal or unequal parts in a whole</li> <li>Identify equal parts when they do not look the same</li> <li>Explain the size of a part in relation to the whole</li> <li>Construct a whole when given a part and the number of parts</li> <li>Identify how many equal parts a whole as been divided into</li> <li>Use fraction notation to describe an equal part of the whole</li> <li>Represent unit fractions in different ways</li> <li>Solve problems involving identifying equal parts and the whole</li> </ul>	<p><b><u>Compare and order unit fractions</u></b></p> <ul style="list-style-type: none"> <li>Compare unit fractions by looking at the denominator</li> <li>Compare and order unit fractions by looking at the denominator</li> <li>Identify when unit fractions cannot be compared</li> <li>Solve problems involving comparing unit fractions</li> <li>Solve problems involving comparing and ordering unit fractions in a range of contexts</li> </ul>	<p><b><u>Calculate the value of a part (fractions as operators)</u></b></p> <ul style="list-style-type: none"> <li>Construct a whole when given one part and the fraction that it represents</li> <li>Use knowledge of parts and wholes in unit fractions to solve problems</li> <li>Use knowledge of parts and wholes to find a unit fraction of a set of objects</li> <li>Calculate the value of a part by using understanding of division and knowledge of division facts</li> <li>Calculate the value of a part by connecting division knowledge with finding a fraction of a quantity</li> </ul>	<p><b><u>Non-unit fractions</u></b></p> <ul style="list-style-type: none"> <li>Explain that non-unit fractions are composed of more than one unit fraction</li> <li>Identify non-unit fractions</li> <li>Identify the number of equal or unequal parts in a whole in different contexts</li> <li>Use knowledge of non-unit fractions to solve problems</li> <li>Use knowledge of unit fractions to find one whole</li> <li>Place fractions between 0 and 1 on a number line</li> <li>Compare fractions using knowledge of non-unit fractions including those equal to 1</li> <li>Compare non-unit fractions with the same denominator</li> <li>Review comparing unit fractions</li> <li>Compare fractions with the same numerator</li> </ul>	<p><b><u>Composition of non-unit fractions: addition and subtraction</u></b></p> <ul style="list-style-type: none"> <li>Use repeated addition of a unit fraction to form a non-unit fraction</li> <li>Use repeated addition of a unit fraction to form 1</li> <li>Add up fractions with the same denominator</li> <li>Add on fractions with the same denominator</li> <li>Add fractions with the same denominator and generalise the rule</li> <li>Subtract fractions with the same denominator</li> <li>Add and subtract fractions with the same denominator in a range of contexts</li> <li>Explain that addition and subtraction of fractions are inverse operations</li> <li>Subtract fractions from a whole by converting the whole to a fraction</li> <li>Represent a whole as a fraction in different ways and use this to solve subtraction problems</li> </ul>
<p><b>Key vocab</b></p>					