

Learning Progressions	Addition Subtraction & Whole Number Place Value Learning Outcomes	Resources		
		Maths Aotearoa	Wilkie Way	Pearson Mathematics
<b>AT Signposts 1 -2</b> <b>P&amp;R Signpost 1</b>	<ul style="list-style-type: none"> <li>Say the number words 1 – 10 in sequence in English and in Te Reo</li> <li>Count objects in a sequence</li> <li>Copy a simple repeating pattern</li> <li>Create a simple repeating pattern</li> <li>Make a set of objects using one to one counting (to at least a set of 6)</li> </ul>	<b>Book 1a Unit 1</b> Making Sense of Small numbers <b>Cards 1a Unit 1</b> Nos. 9 – 24 <b>BLM 1a Unit 1</b> Nos. 15 - 18	<b>Level 1a Workbooks</b> <b>1</b> Numbers to 6 <b>2</b> Order numbers to 6	<b>Level 1</b> <b>Unit 2</b> Patterns & Counting <b>Unit 3</b> Numerals & Sets to 6 <b>Unit 4</b> Ordering Numbers to 6 <b>Cards Set 1 Stage 0</b> Nos. 5 - 20
<b>AT Signpost 2</b> <b>P&amp;R Signpost 1-2</b> <b>S&amp;E Signpost 1</b>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>Make a set of objects using one to one counting (to at least a set of 10)</li> <li>Match the correct numeral to a set of objects up to at least 10</li> <li>Understand zero as an empty set (nothing of something)</li> <li>Recognise finger patterns</li> <li>Write numerals 0 to 10</li> <li>Describe the position of a number in relation to another number</li> <li>Give the number before and after a given number in the range 0 – 6</li> <li>Give the number between two numbers in the range 0 – 6</li> <li>Count forwards and backwards in the range 0 - 10</li> <li>Partition a set of objects into two or more smaller sets of objects.</li> <li>Notice patterns in teacher modelled recording of partitions.</li> <li>Combine two or more sets but not necessarily be able to say how many altogether without prompting to count all.</li> <li>Partition numbers 2, 3 4 and 5 into two groups and recall all possible pairings.</li> <li>Recognise these are the only possible pairs for these numbers.</li> </ul>	<b>Book 1a Unit 2</b> Exploring numbers to 10 <b>Cards 1a Unit 2</b> Nos. 1 – 25 <b>BLM 1a Unit 2</b> Nos.1 - 13	<b>Level 1a Workbooks</b> <b>3</b> Numbers to 10 <b>4</b> Ordering to 10 <b>5</b> Joining & Partitioning <b>6</b> Groupings with 5	<b>Level 1</b> <b>Unit 5</b> Numerals & Sets to 10 <b>Unit 6</b> Joining & Partitioning <b>Unit 7</b> Ordering Numbers to 10 <b>Unit 8</b> Grouping within 5 <b>Unit 9</b> Number Patterns <b>Cards Set 1 Stage 1</b> Nos.1 – 20

		<b>Maths Aotearoa</b>	<b>Wilkie Way</b>	<b>Pearson Mathematics</b>
<b>AT Signpost 3</b> <b>P&amp;R Signpost 2</b> <b>S&amp;E Signpost 1 -2</b>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>• Read and write numbers to 20</li> <li>• Sequence and order numbers to 20</li> <li>• Reliably count a set of objects up to 20</li> <li>• Give the number before and after in the range 0 – 20</li> <li>• Give the number between two numbers in the range 0 – 20</li> <li>• Give the number one more and one less/fewer in the range 0 - 20</li> <li>• Count all objects to find how many altogether;</li> <li>• Image objects and count all to find how many altogether;</li> <li>• Take a number of objects away from a set and count how many remain using the objects:</li> <li>• Imagine take a number of objects away from a set and count how many remain using imaging.</li> <li>• Recall doubles to 10</li> <li>• Recalls pairs to within 5</li> <li>• Draw a picture to show an addition or subtraction situation;</li> <li>• Recognise symbols + and – as “and” and “take away”</li> <li>• Recognise the symbol = as “is the same as” and “is equal to”</li> </ul>	<b>Book 1a Unit 3</b> Combining Comparing & Ordering <b>Cards Unit 3</b> Nos. 16 – 25 <b>BLM 1a Unit 3</b> Nos. 27 - 28  <b>Book 1a Unit 4</b> Combining, Grouping & Sharing <b>Cards 1a Unit 4</b> Nos. 1 – 10 <b>BLM 1a Unit 4</b> Nos. 3 - 10	<b>Level 1a Workbooks</b> <b>7</b> Addition <b>8</b> Subtraction (take away) <b>9</b> Comparing numbers <b>10</b> Numbers to 20	<b>Level 1 Unit 10</b> Addition & Subtraction within 10 <b>Unit 11</b> Numbers up to 20 <b>Unit 12</b> Special groupings <b>Unit 13</b> Using a number line <b>Unit 15</b> Recalling Number Facts <b>Cards Set 2 Stage 2</b> Nos 1 – 20 <b>Cards Set 2 Stage 3</b> Nos. 1 – 15 & 20
<b>AT Signpost 4</b> <b>P&amp;R Signpost 3</b> <b>S&amp;E Signpost 2</b>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>• Read and write two digit numbers</li> <li>• Count on/back from any number in range 0 – 100</li> <li>• Use the commutative property of addition</li> <li>• Use counting on to solve addition problems.</li> <li>• Understand subtraction is not commutative</li> <li>• Use counting backwards to solve subtraction (take away) type problems.</li> <li>• Use counting on or back to solve a difference situation – how many more or how many less?</li> <li>• Recognise and use patterns to recall basic facts</li> <li>• Recall the pairs to make ten, 5+ and doubles to 20</li> <li>• Apply recall of known facts to addition and subtraction situation;</li> <li>• Use known facts to reason unknown facts.</li> <li>• Begin connecting addition and subtraction facts.</li> <li>• Use + - = to represent an addition or subtraction situation</li> </ul>	<b>Book 1b Unit 1</b> Understanding Addition & Subtraction <b>Cards 1b Unit 1</b> Nos. 1 – 25 <b>BLM 1b Unit 1</b> Nos 1 - 5  <b>Book 1b Unit 2</b> Larger Numbers <b>Cards 1b Unit 2</b> Nos. 1 – 4 <b>BLM 1b Unit 2</b> Nos 1 - 6	<b>Level 1a Workbooks</b> <b>11</b> Doubles to 20  <b>Level 1b Workbooks</b> <b>13</b> Adding & Taking Away <b>14</b> Patterns & Relationship <b>15</b> Finding the Difference <b>16</b> Making 10 <b>17</b> Sequencing to 100	<b>Level 1 Unit 17</b> Numbers to 100 <b>Unit 18</b> Beginning Place Value <b>Unit 19</b> Addition & Subtraction to 20 <b>Unit 20</b> Using Equations <b>Cards Set 3 Stage 4</b> Nos 3 - 11

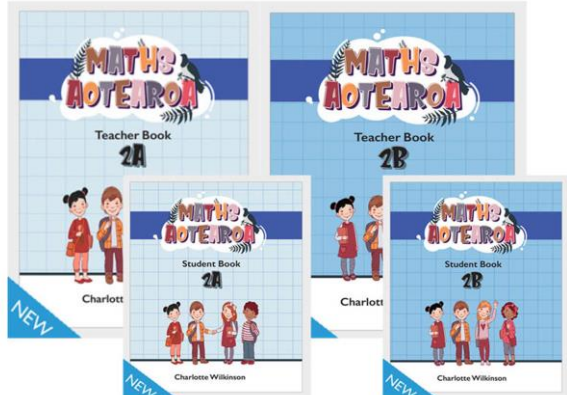
		<b>Maths Aotearoa</b>	<b>Wilkie Way</b>	<b>Pearson Mathematics</b>
<b>AT Signpost 4-5</b> <b>P&amp;R Signpost 3</b> <b>S&amp;E Signpost 2 -3</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Count within 1000 starting from any number in ones and tens</li> <li>Recognise the tens and the ones columns</li> <li>Recognise and use the patterns on a hundreds square</li> <li>Expand a 2 digit number into a standard partition</li> <li>Give the number of groups of tens and ones in a 2 digit number</li> <li>Add and subtract 10 to any number</li> <li>Read and solve addition &amp; subtraction word problems within 20</li> <li>Can create a number story for an addition or subtraction equation</li> <li>Recall family of facts for 10</li> <li>Recall teens numbers and doubles to 20</li> <li>See patterns &amp; relationships between addition facts</li> <li>Use known addition facts to reason unknown addition facts</li> <li>Use relationship between addition and subtraction (family of facts)</li> </ul>	<p><b>Book 1b Unit 4</b> Beginning place value – unlocking the number system</p> <p><b>Cards 1b Unit 4</b> Nos.1 – 27</p> <p><b>BLM 1b Unit 4</b> Nos. 1 - 13</p> <p><b>Book 2a Unit 1</b> Addition, Subtraction &amp; Place Value</p> <p><b>Student Book 2a</b> Chapters 1 – 5</p>	<p><b>Level 1b Workbooks</b></p> <p><b>23</b> Using 10 as a counting set</p> <p><b>24</b> Importance of a group of 10</p> <p><b>25</b> Add &amp; subtract to 20</p> <p><b>Level 2a Workbooks</b></p> <p><b>1</b> Facts to 10, Teens &amp; Doubles</p> <p><b>2</b> Numbers to 100 PV</p> <p><b>3</b> Money</p>	<p><b>Level 1</b></p> <p><b>Unit 21</b> Recalling Numbers Facts 2</p> <p><b>Unit 23</b> Using 10s</p> <p><b>Unit 24</b> Understanding place value</p> <p><b>Unit 25</b> Using doubles and teens</p> <p><b>Cards Set 3 Stage 4</b> Nos 12 – 15 Nos 23 - 40</p> <p><b>Book 2a Unit 1</b> Addition, Subtraction &amp; Place Value</p> <p><b>Student Book 2a</b> Chapters 1 - 5</p>
<b>AT Signpost 5</b> <b>P&amp;R Signpost 3</b> <b>S&amp;E Signpost 3</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Recall addition &amp; subtraction facts within 10</li> <li>Use addition &amp; subtraction facts repeated in the tens column</li> <li>Round a two digit number to the closest decade</li> <li>Can make a reasonable estimate for an addition or subtraction situation</li> <li>Uses add or subtract 10 to add or subtract 9</li> <li>Use teens and doubles to derive addition and subtraction facts to 20</li> <li>Adds &amp; subtracts a single digit to/from a double digit number without counting on or back.</li> <li>Uses the = symbol as a balance between equivalent expressions</li> </ul>	<p><b>Book 2a Unit 3</b> Addition &amp; Subtraction</p> <p><b>Student Book 2a</b> Chapters 9 – 12</p> <p><b>Book 2a Unit 5</b> Addition and Subtraction</p> <p><b>Student Book 2a</b> Chapters 15 – 17</p>	<p><b>Level 2a Workbooks</b></p> <p><b>6</b> Add &amp; Subtract decades, rounding to closest decade</p> <p><b>7</b> Multi Digit + using facts to 10</p> <p><b>8</b> Multi Digit - using facts to 10</p> <p><b>9</b> Using 10 and Decades</p> <p><b>10</b> Number Facts to 20</p> <p><b>12</b> + single digit to a double digit</p> <p><b>13</b> - a single digit from a double digit</p>	<p><b>Book 2a Unit 3</b> Addition &amp; Subtraction</p> <p><b>Student Book</b> Chapters 9 – 12</p> <p><b>Book 2a Unit 5</b> Addition and Subtraction</p> <p><b>Student Book 2a</b> Chapters 15 – 17</p>

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<b>AT Signpost 5 - 6</b> <b>P&amp;R Signpost 4</b> <b>S&amp;E Signpost 3-4</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Recall or derive addition &amp; subtraction facts within 20</li> <li>Recall and use basic addition &amp; subtraction facts and place value knowledge in double digit addition &amp; subtraction calculations.</li> <li>Recognise the difference between operational symbols and relationship symbols</li> <li>Uses symbols = &lt; and &gt; to show equivalent and non- equivalent expressions</li> </ul>	<p><b>Book 2b Unit 1</b> Addition, Subtraction &amp; Place Value <b>Student Book 2b</b> Chapters 1 – 5</p>	<p><b>Level 2b Workbooks</b> <b>14</b> Double digit addition <b>15</b> Double digit subtraction <b>16</b> Numbers to 999 <b>17</b> Working with money</p>	<p><b>Book 2b Unit 1</b> Addition &amp; Subtraction &amp; Place Value <b>Student Book 2b</b> Chapters 1 - 5</p>
<b>AT Signpost 6</b> <b>P&amp;R Signpost 4</b> <b>S&amp;E Signpost 4</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Name columns in whole numbers place value</li> <li>Know the value of the digit from its position in a number</li> <li>Can read and write larger numbers</li> <li>Understand the relationship between 10, 100, 1000</li> <li>Expand a number to a standard partition and regroup (<math>200 + 30 + 4 = 100 + 120 + 14</math>)</li> <li>Build place value knowledge and number sense through exploring different ways of working with numbers in addition and subtraction calculations.</li> <li>Round 3 digit numbers to the closest hundred and closest decade</li> <li>Make reasonable estimates for addition and subtraction</li> <li>Select an efficient mental strategy for addition &amp; subtraction</li> <li>Carry out a standard vertical algorithm for addition &amp; subtraction</li> <li>Can record an additive equality statement and know it can be solved by subtraction (<math>245 + ? = 624</math>)</li> </ul>	<p><b>Level 2b Unit 3</b> Addition &amp; Subtraction <b>Student Book 2b</b> Chapters 9 – 11</p> <p><b>Level 3a Unit 2</b> Using the number system for addition &amp; subtraction <b>Student Book</b> Chapters 4 – 6</p>	<p><b>Level 2b Workbooks</b> <b>21</b> Rounding &amp; Estimating <b>22</b> Adding 3 digit numbers <b>23</b> Subtracting 3 digit numbers</p> <p><b>Level 3a Workbooks</b> <b>2</b> Addition &amp; Subtraction <b>3</b> Larger Numbers</p>	<p><b>Level 2b Unit 3</b> Addition &amp; Subtraction <b>Student Book 2b</b> Chapters 9 – 11</p> <p><b>Level 3a Unit 1</b> Addition &amp; Subtraction <b>Student Book 3a</b> Chapters 1 – 3</p>
<b>AT Signpost 6- 7</b> <b>P&amp;R Signpost 4-5</b> <b>S&amp;E Signpost 4- 5</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Read, write, order and compare large numbers</li> <li>Understand the significance of zero to the number system in representing repeated groups of 10</li> <li>Make a reasonable estimate for a whole number addition and subtraction calculation</li> <li>Proficiently carries out a standard vertical algorithm for addition and subtraction</li> <li>Extends mental and paper strategies for addition and subtraction to one or two place decimals</li> <li>Use inverse relationship between addition &amp; subtraction with any number</li> </ul>	<p><b>Level 3b Unit 2</b> Using the number system for addition &amp; subtraction <b>Student Book</b> Chapters 4 – 6</p> <p><b>Level 3b Unit 5</b> Exploring Algebra <b>Student Book</b> Chapters 14 &amp; 15</p>	<p><b>Level 3b Workbooks</b> <b>10</b> Whole Number Place Value <b>11</b> Addition &amp; Subtraction <b>16</b> Exploring Algebra</p>	<p><b>Level 3b Unit 1</b> Place Value, Addition &amp; Subtraction <b>Student Book</b> Chapters 1 - 3</p> <p><b>Level 3b Unit 4</b> The Four Operations <b>Students Book 3b</b> Chapters 14 - 16</p>

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<p><b>AT Signpost 7 -8</b>  <b>P&amp;R Signpost 5</b>  <b>S&amp;E Signpost 5</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Make a reasonable estimate for any addition and subtraction calculation</li> <li>• Select an appropriate and efficient method for solving addition and subtraction problems with whole numbers and decimals</li> <li>• Make a critical choice in method of calculation – paper, machine or mental</li> <li>• Use + and – as positive and negative integers understanding they indicate a movement in a specific direction with zero as a centre point.</li> <li>• Use the terminology integers and directed numbers</li> <li>• Determine the order of operations required to solve a multi-step problem</li> <li>• Use brackets to communicate the order of operations required to solve a multi-step problem</li> <li>• Use the memory button on a calculator when solving multi-step problems</li> <li>• Use inverse operations to solve problems</li> <li>• Solve problems using algebraic convention of a letter symbol knowing the symbol can represent a single value in an equation</li> <li>• Use a spread sheet to perform simple calculations</li> <li>• Use simple formulae on a spreadsheet</li> </ul>	<p><b>Under development</b></p>	<p><b>Under development</b></p>	<p><b>Level 4a Unit 1</b>  Working with whole numbers  <b>Chapter 1</b>  Addition &amp; Subtraction  <b>Chapter 3</b>  Positive &amp; Negative Numbers</p> <p><b>Level 4a Unit 2</b>  Working with Fractional numbers  <b>Chapter 6</b>  Decimal addition &amp; subtraction</p> <p><b>Level 4a Unit 3</b>  Understanding and using equation  <b>Chapter 9</b>  Order of Operation  <b>Chapter 10</b>  Finding the rule  <b>Chapter 11</b>  Using spreadsheets</p>
<p><b>AT Signpost 8</b>  <b>P&amp;R Signpost 5 -6</b>  <b>S&amp;E Signpost 5- 6</b></p>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Work efficiently with whole numbers, integers, fractions and decimals</li> <li>• Design and use tables to identify number relationships</li> <li>• Use an equation to describe a linear relationship</li> <li>• Understand and use equality to simplify equations</li> <li>• Generalise a linear relationship to create a formula</li> <li>• Use a formula on a spreadsheet to solve a problem</li> </ul>	<p><b>Under development</b></p>	<p><b>Under development</b></p>	<p><b>Level 4b Unit 1</b>  Working with whole numbers  <b>Chapter 2</b>  Positive and Negative Numbers</p> <p><b>Level 4b Unit 3</b>  Understanding and Using Equations  <b>Chapter 6</b>  Creating equations  <b>Chapter 7</b>  Using formulae</p>

Available from [www.edify.co.nz](http://www.edify.co.nz)

26 Practice workbooks available from Wilkie Way directory page



Maths Aotearoa and Pearson Mathematics available from

<https://www.edify.co.nz/>

Pearson Mathematics – Levels 1 & 2 no longer available

Pearson Mathematics Level 3 available until end of 2021

Pearson Mathematics Level 4 available until end of 2022

Maths Aotearoa is the new updated edition of Pearson



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