



## Using Maths Aotearoa to support the implementation of the October 2025 New Zealand Maths Curriculum

While the curriculum statements are the knowledge students need to acquire, the mathematical processes are the ways in which the knowledge is taught. Activities within Maths Aotearoa provide the opportunities for: Investigating situations, representing situations, connecting situations, generalising findings, exploring and justifying findings.

### During the First Year

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<p><b>Maths Aotearoa Book 1A</b>  <b>Unit 4 Combining, Grouping &amp; Sharing</b>  <b>Element 1 Numbers to 20</b></p> <ul style="list-style-type: none"> <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>• Investigate teen numbers as 10 + (including Te Reo Maori)</li> <li>• Element 2</li> <li>• Rote counting sequences in 2s, 5s, 10s</li> <li>• Know decade names and write decade symbols</li> </ul> <p><b>Maths Aotearoa Book 1B</b>  <b>Unit 2 Larger Numbers &amp; Beginning Multiplication</b>  <b>Element 1 Sequencing to 100</b></p> <ul style="list-style-type: none"> <li>• Count on from any number within the range 0 – 100</li> <li>• Count backwards from any number in the range 0 – 100</li> <li>• Read and write two digit numbers</li> </ul> <p><b>Element 2 Number patterns with Multiples</b></p> <ul style="list-style-type: none"> <li>• Count in twos, fives and tens</li> <li>• Recognise patterns in counting sequences</li> <li>• Notice odd and even numbers</li> <li>• Make equal groups</li> </ul>	<p style="text-align: center;"><b>Knowledge: The facts, concepts, principles and theories to teach</b></p> <p><b>Number Structures</b></p> <ul style="list-style-type: none"> <li>• The whole numbers from 0 to 100 form a sequence.</li> <li>• The base 10 number system is organised by place value (tens and ones for two-digit numbers).</li> <li>• The names of numbers between 20 and 99 use the ‘-ty’ suffix.</li> <li>• Ordinal suffixes (e.g. -st, -rd, -nd, -th) can be used to represent a position in a sequence (e.g. 2nd, 3rd).</li> <li>• Te reo Māori number naming is based on place value (e.g. rua tekau mā tahi — two 10s and 1).</li> <li>• Counting can be organised in groups (e.g. ten ones can be renamed as one 10).</li> <li>• The same value can be represented with different groupings (e.g. 12 is six pairs or 12 ones or one 10 and two ones).</li> <li>• Counting in 2s from zero or an even number produces even numbers.</li> <li>• Counting in 2s from an odd number produces odd numbers.</li> </ul>

## **Maths Aoteroa Book 1A**

### **Unit 3: Combining, Comparing & Ordering**

#### **Element 4 Addition and Subtraction**

- Recall doubles to 10
- Know groupings with 5

### **Unit 4 Combining, Grouping & Sharing**

#### **Element 1 Numbers to 20**

- Give the number before and after in the range 0 – 20

#### **Element 2 Equal Grouping**

- Create equal groups from a set of objects
- Solve equal group type word problems
- Count in twos, fives and tens
- Solve a word problem by equal sharing

## **Maths Aoteroa Book 1B**

### **Unit 1: Understanding Addition & Subtraction**

#### **Element 1 Adding & Taking Away**

- Use counting on to solve addition problems.
- Use counting backwards to solve subtraction (take away) type problems.

#### **Element 2: Patterns & Relationship**

- Recognise and use patterns to recall basic facts
- Apply recall of known facts to addition and subtraction situation;
- Use known facts to reason unknown facts.
- Begin connecting addition and subtraction facts.

#### **Element 3 Complementary Addition and Difference**

- Compare numbers to find the difference in quantity
- Use counting on to solve a difference situation – how many more or how many less?
- Use counting backwards to solve a difference situation
- Use recall of known facts to solve a difference situation.

#### **Element 4 Focus on Making 10**

- Recognise the pairs to make ten
- Notice the pattern in pairs to make ten
- Reason unknown pairs from known pairs to make ten.

## **Number Operations**

- Adding or subtracting 0 does not change a number (the additive identity property).
- Changing the order in which numbers are added does not change the result (the commutative property of addition).
- When subtracting numbers, the order of numbers is important (i.e. subtraction is not commutative).
- Multiplication involves combining equal groups.
- Division involves equal grouping or sharing.
- Counting objects in equal groups can be used to multiply (combining) or divide (sharing).

<p><b>Maths Aotearoa Book 1A</b>  <b>Unit 4 Combining, Grouping &amp; Sharing</b></p> <ul style="list-style-type: none"> <li>• Solve a word problem by equal sharing</li> <li>• Halve a shape into equal pieces</li> <li>• Find half of a number of objects by equal sharing between two</li> <li>• Quarter a shape into four equal pieces</li> <li>• Find quarter a number of objects by equal sharing between four</li> </ul>	<p><b>Rational Numbers</b></p> <ul style="list-style-type: none"> <li>• Fractions describe parts of a whole.</li> <li>• A whole can be divided into halves (i.e. two equal parts).</li> <li>• A whole can be divided into quarters (i.e. four equal parts).</li> <li>• A half means one part of a set that has been divided into two equal groups or parts.</li> <li>• A quarter means one part of a set that has been divided into four equal groups or parts.</li> <li>• Equal sharing means division into groups with the same number of objects in each group.</li> <li>• Fractions of sets can be found by sharing.</li> </ul>
<p><b>Maths Aotearoa Book 1B</b>  <b>Unit 4 Beginning Place Value</b>  <b>Element 4 Using New Zealand Money</b></p> <ul style="list-style-type: none"> <li>• Recognise New Zealand coins and notes</li> </ul>	<p><b>Financial Mathematics</b></p> <ul style="list-style-type: none"> <li>• New Zealand coins and notes have different values.</li> </ul>
<p><b>Maths Aotearoa Book 1A</b>  <b>Unit 3: Combining, Comparing &amp; Ordering</b>  <b>Element 1 Shape and Pattern</b></p> <ul style="list-style-type: none"> <li>• Identify the rule in a repeat of a visual pattern and continue the pattern</li> </ul> <p><b>Element 4 Addition &amp; Subtraction</b></p> <ul style="list-style-type: none"> <li>• Recognise the symbols + and - as 'and' and 'take away'</li> <li>• Recognise the symbol = as 'is the same as' and 'is equal to'</li> </ul> <p><b>Maths Aotearoa Book 1B</b>  <b>Unit 2 Larger Numbers &amp; Beginning Multiplication</b>  <b>Element 2 Number patterns with Multiples</b></p> <ul style="list-style-type: none"> <li>• Count in twos, fives and tens</li> <li>• Recognise patterns in counting sequences</li> </ul>	<p><b>Algebra: Equations &amp; relationships</b></p> <ul style="list-style-type: none"> <li>• The symbols + and - represent addition and subtraction, and the equal sign shows that two sides of an equation represent the same quantity.</li> <li>• An open number sentence is a statement that contains an unknown value.</li> <li>• Patterns are made up of elements (including numeric or spatial elements) in a sequence governed by a rule, and they arise in a range of situations (e.g. cultural patterns, patterns in the local environment, patterns on everyday objects).</li> <li>• Ordinal numbers (e.g. 1st, 2nd, 3rd) can be used to describe the elements in a sequence.</li> <li>• Repeating patterns have a repeating group of elements called the unit of repeat.</li> <li>• A missing element can be predicted from other elements in the pattern.</li> </ul> <p><b>This content is to be taught across the first two years.</b></p>
<p><b>Maths Aotearoa Book 1A</b>  <b>Unit 3: Combining, Comparing &amp; Ordering</b>  <b>Element 3 Comparing Measures</b></p> <ul style="list-style-type: none"> <li>• Directly compare objects within a specific measurement attribute using the appropriate language of measure</li> <li>• Order objects with a specific measurement attribute</li> </ul>	<p><b>Measuring</b></p> <ul style="list-style-type: none"> <li>• Length is the distance between two points.</li> <li>• Weight is how heavy something feels.</li> <li>• Capacity is the maximum amount of liquid a container can hold. This content is to be taught across all of the first year.</li> <li>• Time can be measured in a range of units: years, months, weeks, days, hours, minutes, and seconds.</li> <li>• Time is measured using clocks, which can be analogue or digital.</li> <li>• A sequence of events can be described using everyday language (e.g. before, after, tomorrow, yesterday, next, and last).</li> <li>• The parts of the day include morning, midday, noon, afternoon, evening, night, and midnight.</li> </ul>

<p><b>Maths Aotearoa Book 1A</b>  <b>Unit 3: Combining, Comparing &amp; Ordering</b>  <b>Element 1 Shape and Pattern</b></p> <ul style="list-style-type: none"> <li>Name common 2 dimensional shapes</li> <li>Name common 3 dimensional shapes</li> <li>Confidently use language of appearance</li> </ul> <p><b>Element 4 Symmetry and Patterns</b></p> <ul style="list-style-type: none"> <li>Explore reflections</li> <li>Create symmetrical designs</li> <li>Recognise reflective symmetry in shapes</li> </ul> <p>(Note symmetry has no mention in the year 1 curriculum)</p> <p><b>Maths Aotearoa Book 1B</b>  <b>Unit 1 Understanding Addition and Subtraction</b>  <b>Element 6 Exploring Position and Orientation</b></p> <ul style="list-style-type: none"> <li>Make whole, half and quarter turns</li> <li>Follow instructions involving direction, distance and turning</li> <li>Give instructions involving direction, distance and turning</li> </ul>	<p><b>Geometry</b>  <b>Shapes</b></p> <ul style="list-style-type: none"> <li>3D shapes have attributes such as size, colour, faces, edges, and vertices that can be observed and described using geometric language.</li> </ul> <p><b>Spatial Reasoning</b></p> <ul style="list-style-type: none"> <li>Shapes can be composed from smaller shapes or decomposed into smaller shapes.</li> </ul> <p><b>Pathways</b></p> <ul style="list-style-type: none"> <li>The position of a location can be described relative to another location, including a known environmental feature.</li> <li>Maps are 2D representations of places in the world showing the view from above with symbols to show locations and landmarks.</li> </ul> <p><b>This content is to be taught across the first two years.</b></p> <p><i>Will need to explore maps - not in Maths Aotearoa until Book 2A</i></p>
<p><b>Maths Aotearoa Book 1B</b>  <b>Unit 1 Understanding Addition &amp; Subtraction</b>  <b>Element 5 Exploring Statistics &amp; Probability</b></p> <p>With teacher assistance:</p> <ul style="list-style-type: none"> <li>Pose a question or assertion</li> <li>Decide the data to be collected</li> <li>Collect the data</li> <li>Use tally marks as a data collection tool</li> <li>Display the data in a pictograph or bar chart</li> <li>Answer questions based on the data</li> <li>Draw conclusions around the question asked or assertion made</li> </ul> <ul style="list-style-type: none"> <li>Identify possible outcomes and notice variations in outcomes (<i>no longer in the curriculum</i>)</li> </ul>	<p><b>Statistics</b>  <b>Developing knowledge from data</b></p> <ul style="list-style-type: none"> <li>Data is information collected about the world.</li> <li>A variable refers to an attribute being studied (e.g. colour, height, age of children).</li> <li>A categorical variable (e.g. colour, brand) classifies objects into groups (categories).</li> <li>Categorical data can be counted.</li> </ul> <p><b>This content is to be taught across the first two years.</b></p> <p><b>Visualisation of data</b></p> <ul style="list-style-type: none"> <li>Data visualisations are representations (including picture graphs) of all available values for a variable that show the frequency for each value.</li> <li>Picture graphs use a consistent image for each value; across the categories each image has the same height (for a vertical chart).</li> </ul> <p><b>Interpretation of data</b></p> <ul style="list-style-type: none"> <li>Data visualisations are representations that help reveal the story of a set of data.</li> </ul> <p><b>This content is to be taught across the first three years.</b></p>