



## Using Maths Aotearoa and Wilkie Way to deliver the refreshed New Zealand Curriculum

Maths Aotearoa teacher book 1B is set out in 4 units providing a sequenced approach to developing key number knowledge, skills and concepts. Learning experiences for this deceptively large area of foundational learning can be found in all 4 units of Maths Aotearoa Book 1B. The learning area is very language dense and a focus on language development should continue at all times during everyday activities.

Suggested activities are provided in the teacher book, some referring to the activity cards

Blackline masters (included in the teacher book) provide follow up work to activities or further learning opportunities.

*Maths Aotearoa teacher books and activity cards are available from [edify.co.nz](http://edify.co.nz)*

*Wilkie Way members also have access to Professional and Classroom Resources on the teaching of early geometric ideas*

### Phase 1: Year 2

#### Understand: (big ideas)

As students build knowledge through their use of the mathematical and statistical processes, they begin to understand:

- Patterns and variation
- Logic and reasoning
- Visualisation and application

#### Do (practices)

Students will have learning opportunities, and be guided to:

- Investigate situations
- Represent situations
- Connect situations
- Generalise findings
- Explain and justify findings

### Know: Context of Geometry

Shapes	Spatial Reasoning	Pathways
Identify, describe and sort 2D & 3D shapes including ovals, semi circles, polygons rectangular prisms (cuboids) pyramids, hemispheres and cones using the properties of shapes	Anticipate which smaller shapes might be used to compose and decompose a target shape, and then check by making the shape. Recognise lines of symmetry in patterns or pictures and create or complete symmetrical pictures or patterns.	Follow and give instructions to move people or objects to a different location using direction, distance (e.g number of steps) and half and quarter turns. Interpret diagrams to describe the position of objects and places in relation to other objects and places.

### Maths Literacy Development

- Assistance with learning and using specialist vocabulary.
- Assistance with reading & understanding math texts.
- See vocabulary list in curriculum document.

#### Concepts being developed

- Direction (which way?), Distance (how far?), Location (where?)
- Angle as a turn around a fixed point
- Reflective symmetry
- Equality as a balance between two halves
- Classification by attribute

#### Key knowledge being developed

- Direction left and right
- Half as two equal parts
- Quarter as four equal parts
- Language of geometry to describe attributes
- Use attributes to name the shape

## Maths Aotearoa Book 1B

<b>Unit 1: Understanding Addition and Subtraction (<i>Continued alongside Unit 2</i>)</b>		<b>Support Material available from Wilkie Way website wilkieway.co.nz: membership area (subscription)</b>
<b>Element 6 Exploring Position and Orientation</b> <ul style="list-style-type: none"> <li>Identify circle, square, rectangle (oblong) and triangle in their 3D world</li> <li>Describe what they can see with increasing geometric language</li> </ul>	<b>Maths Aotearoa Activity Cards</b> <b>Unit 1</b> 29  BLM 12 - 15	<b>Teacher Professional Resources:</b> <b>Curriculum Knowledge:</b> Geometry Pocket Guide: Beginning Geometric Thinking Geometric Progressions  <b>Geometry Phase One</b> Name my shape  <b>Video Lesson</b> 2. Following & Giving Directions
<b>Unit 3: Beginning Fractions</b>		
<b>Element 1 Fractions of Shapes</b> <i>(using some activities from this unit, and in particular the language provides foundational work for developing the concept of fractions of a region)</i> <ul style="list-style-type: none"> <li>Fold shapes into halves and quarters</li> <li>Name the shapes</li> <li>Look at regular and irregular shapes to expand knowledge of the visual attributes of shapes</li> </ul>	<b>Maths Aotearoa Activity Cards</b> <b>Unit 3</b> Cards 1 - 3	
<b>Element 4 Reflective Symmetry</b> <ul style="list-style-type: none"> <li>Recognise reflective symmetry in a pattern</li> <li>Create a pattern with reflective symmetry</li> </ul>	<b>Maths Aotearoa Activity Cards</b> <b>Unit 3</b> Cards 14 - 16  BLM 1 - 5	
<b>Unit 3: Beginning Fractions (<i>Continued alongside Unit 4</i>)</b>		
<b>Element 6 Exploring 2D &amp; 3D Shapes</b> <ul style="list-style-type: none"> <li>Know names of common 2D and 3D shapes</li> <li>Use attributes to identify common 2D shapes (regular and irregular shapes)</li> </ul> <i>(regular shapes have sides and angles of equal length, irregular shapes have sides of differing lengths and therefore different angles)</i>	<b>Maths Aotearoa Activity Cards</b> <b>Unit 3</b> Cards 26 - 29  BLM 22 - 24	