

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

The Maths Aotearoa teacher book 1B is set out in 4 units providing a sequenced approach to developing key number knowledge, skills and concepts.

Shape (Geometry) progress steps come under the headings Classification and Spatial Reasoning on the way to meeting the space progress outcomes at the end of the phase.

Learning experiences for this deceptively large area of foundational learning can be found in all 4 units of Maths Aotearoa Book 1B as set out below. 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

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)	Do (practices)		
<ul> <li>Maths is about seeking patterns</li> <li>Maths is about change and variation</li> <li>Maths involves reasoning - from observations</li> <li>Maths develops within different cultures</li> <li>Maths is created by humans and therefore has a history and continues to evolve.</li> </ul>	Students will have learning opportunities, and be guided to: <ul> <li>Investigate situations</li> <li>Represent situations</li> <li>Connect situations</li> <li>Generalise findings</li> <li>Explain and justify findings</li> </ul>		
Know: Context of Space (Geometry)			
Maths Literacy Development			
<ul> <li>Assistance with learning and using specialist vocab</li> <li>Assistance with reading &amp; understanding math text</li> </ul>	·		
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Concepts being developed	Key knowledge being developed		
Direction (which way?), Distance (how far?),     Location (where?)	<ul> <li>Direction left and right</li> <li>Half as two equal parts</li> </ul>		
Angle as a turn around a fixed point	Quarter as four equal parts		
Reflective symmetry	Language of geometry to describe attributes		
Equality as a balance between two halves	Use attributes to name the shape		
Classification by attribute			

Maths Aotearoa Book 1B				
Unit 1: Understanding Addition and Subtraction (Continued alongside Unit 2)		Support Material available from Wilkie Way website wilkieway.co.nz: membership area (subscription)		
Element 6 Exploring Position and Orientation     Identify circle, square, rectangle (oblong) and triangle in their 3D world     Describe what they can see with increasing geometric language	Maths Aotearoa Activity Cards Unit 1 29 BLM 12 - 15	Teacher Professional Resources: Curriculum Knowledge: Geometry Pocket Guide: Beginning Geometric Thinking Geometric Progressions		
Unit 3: Beginning Fractions		Classroom Resources		
<ul> <li>Element 1 Fractions of Shapes         <ul> <li>(using some activities from this unit, and in particular the language provides foundational work for developing the concept of fractions of a region)</li> <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> </li> <li>Element 4 Reflective Symmetry         <ul> <li>Recognise reflective symmetry in a pattern</li> <li>Create a pattern with reflective symmetry</li> </ul> </li> </ul>	Maths Aotearoa Activity Cards Unit 3 Cards 1 - 3  Maths Aotearoa Activity Cards Unit 3 Cards 14 - 16  BLM 1 - 5	Geometry Name my shape  Video Lesson Geometric thinking GT 2 Left and Right Turns		
Unit 3: Beginning Fractions (Continued	alongside Unit 4)	_		
Element 6 Exploring 2D & 3D Shapes  • Know names of common 2D and 3D shapes  • Use attributes to identify common 2D shapes (regular and irregular shapes)  (regular shapes have sides and angles of equal length, irregular shapes have sides of differing lengths and therefore different angles)	Maths Aotearoa Activity Cards Unit 3 Cards 26 - 29 BLM 22 - 24			