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

Progess outcomes for year 6 ***are more specific and work in year 4 and 5, through books 2B and 3A have provided foundational work to achieve the progress outcomes. Further work in Book 3B extends previous work and introduces new terminology and ideas. Mini projects in each of the units provide assessment opportunities. Many of the learning opportunities provide foundational work for continued student learning in phase 3.***
Each chapter is linked to further learning experiences in Figure it Out.

Maths Aotearoa teacher books and student books are available from edify.co.nz

Wilkie Way members also have access to Professional Resources on the teaching of geometric ideas and further classroom resources

Phase 2: Year 6

Understand: (big ideas)	Do (practices)
• Use maths to seek and understand patterns and relationships • Use maths to work with and make sense of change and variation • Use maths logic & reasoning to explain relationships and justify conclusions • Make use of different cultural views and ideas about mathematics • Embrace the history and evolution of mathematics	Students will have learning opportunities to: • Investigate situations • Represent situations • Connect situations • Generalise findings • Explain and justify findings

Know: Context of Space (Geometry)

Maths Literacy Development

- Use specialist vocabulary associated with shape, space, position and orientation with increasing confidence
- Read & understand math texts involving geometric language and concepts

Concepts being developed	Key knowledge being developed
• Direction (which way?) ,Distance (how far?) Location (where?), representation (object) • Reflective and Rotational symmetry • Tranformations • Spatial thinking • Spatial reasoning • Spatial visualisation • Multiplicative and proportional thinking	• Names for different sorts of triangles: equilateral, isosceles, scalene, right angle • Know terms polygon and polyhedron (plural polyhedra) • Read and interpret scales on a map • Know the convention of labelling corners of shapes and describing the lengths of the sides using the corner labels • Know position of major cities within New Zealand

Maths Aotearoa Book 3B	Support Material available from Wilkie Way website wilkieway.co.nz: membership area (subscription)
Unit 6 Geoemtric Properties	**Teacher Professional Resources:** **Curriculum Knowledge: Measurement** Pocket Guide: Further Developing Geometric Thinking Geometric Progressions **Student Resources:** Geometric problems **Video Lessons** Lines angles and triangles Drawing plane shapes
Chapter 16 Triangles and Angles • Describe and name different sorts of triangles • Discover angles in a triangle always add to 180º • Investigate side length relationships in right angle triangles • Investigate angles within a square **Chapter 17 Parallel and Perpendicular lines** • Use language parallel and perpendicular in meaningful contexts • Introduce parallelogram and rhombus • Extend the description of properties to identify specific quadrilaterals **Chapter 18 Prisms and Pyramids** • Describe the attributes of prisms and pyramids using correct geometric language • Explore building pyramids and prisms (e.g. using polydron) • Design nets for specific prisms	
Unit 7 Transformations	
Chapter 19 Rotations, Reflections and Translations • Recognise reflective and rotational symmetry • Understand the difference between reflective and rotational symmetry • Describe translation on a grid • Design patterns involving reflection, rotation and translation	
Unit 8 Position and Orientation	
Chapter 20 Maps and Pathways • Interpret and use scales to give actual distances • Use compass points to describe direction • Use co-ordinates or grid references to describe position and pathways • Investigate flight paths	