



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

There are currently no progress steps given for year 7 so it is essential to look at the progress outcomes for year 8 and consider the types of learning experiences that students require to build up to achieving the progress outcomes at the end of year 8. The learning experiences are taken from book 4A and directly match with the progress outcomes as written for year 8. You may choose to use the mini projects from Book 4A as assessment tasks in year 7 or 8 for evidence of achievement of the progress outcomes.

There are many more learning opportunities to be found in Figure it Out. Links to Figure it out activities can be found in the Maths Aotearoa teacher books.

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

Wilkie Way members also have access to Professional Resources on the teaching of measurement and measurement problems

### Phase 3: Year 7

Understand: (big ideas)	Do (practices)
<ul style="list-style-type: none"> <li>Use maths to seek and understand patterns and relationships</li> <li>Use maths to work with and make sense of change and variation</li> <li>Use maths logic &amp; reasoning to explain relationships and justify conclusions</li> <li>Make use of different cultural views and ideas about mathematics</li> <li>Embrace the history and evolution of mathematics</li> </ul>	Students will have learning opportunities to: <ul style="list-style-type: none"> <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 Measurement

#### Maths Literacy Development

- Confidently use specialist vocabulary associated with measurement.
- Confidently read & understand math texts involving measurement language and concepts
- Understand the meaning of prefixes using in measurement units

Concepts being developed	Key knowledge being developed
<ul style="list-style-type: none"> <li>Understand the relationship between standard units of measure and use to convert fractions to whole numbers and vice versa</li> <li>Understand time is not based on powers of ten</li> <li>Understand the zero point for measuring time is determined by what needs measuring</li> <li>Understand the degree of accuracy of measure is dependent on the context in which the measurement is to be used.</li> <li>Understand any point on a scale can be used as a zero point</li> </ul>	<ul style="list-style-type: none"> <li>Know the base metric units and the prefixes of other units describe the relationship to the base unit</li> <li>Know shapes can be decomposed or recomposed to help find perimeters, areas and volumes</li> <li></li> </ul>

<p style="text-align: center;"><b>Maths Aotearoa Book 4A</b></p>	<p style="text-align: center;"><b>Support Material available from Wilkie Way website <a href="http://wilkieWAY.co.nz">wilkieWAY.co.nz</a>: membership area (subscription)</b></p>
<p><b>Unit 4: Chapter 14 Lines and Angles</b>  <i>This chapter sits under the unit on Geometric Properties as angles also are part of describing and defining shapes as well as used in describing position and orientation.</i></p> <ul style="list-style-type: none"> <li>• Use the language of angles- acute, obtuse, reflex</li> <li>• Use the language of straight lines - vertical, horizontal, diagonal, parallel, perpendicular, intersection</li> <li>• Draw conclusions about angles at an intersection</li> <li>• Use a protractor to measure angles accurately</li> </ul>	<p><b>Teacher Professional Resources:</b>  <b>Curriculum Knowledge: Measurement</b></p> <ul style="list-style-type: none"> <li>• Pocket Guide: Using Standard Units of Measure</li> <li>• Measurement Progressions</li> </ul>
<p><b>Unit 7 Measurement</b>  <b>Chapter 18 Mass</b></p> <ul style="list-style-type: none"> <li>• Estimate mass in relation to a fixed mass</li> <li>• Convert between grams and kilograms choosing to work with decimal numbers or whole number</li> <li>• Solve problems in the context of mass</li> <li>• Read a variety of scales</li> </ul> <p><b>Chapter 19 Length</b></p> <ul style="list-style-type: none"> <li>• Use any point on a ruler as a zero point</li> <li>• Convert between units of linear measure</li> <li>• Solve problems involving conversion between units</li> </ul> <p><b>Chapter 20 Capacity, Area and Volume</b></p> <ul style="list-style-type: none"> <li>• Consider all attributes of an object that could be measured</li> <li>• Use side measures to calculate perimeter, area and volume</li> <li>• Convert between units of measure</li> </ul> <p><b>Chapter 21 Measuring Time</b></p> <ul style="list-style-type: none"> <li>• Convert a.m. and p.m. times to 24 hour clock</li> <li>• Calculate difference between times</li> <li>• Solve problems involving time</li> <li>• Read a simple timetable</li> </ul>	<p><b>Student Resources:</b>  Measurement problems</p>