



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

The progress steps given for year 5 statistics focus on recognising the need for relevant and useable data and thinking about why data may vary. Sorting data was the focus for year 4 and in year 5 the focus changes to further ways of displaying data. It is essential to look at the progress outcomes for year 6, along with the learning progressions and consider the stepping stones and learning opportunities students can build on to achieve all the progress outcomes specified for the end of the phase. Year 5 learning opportunities come from Book 3A of Maths Aotearoa as part of the structured approach to learning mathematical concepts, skills and knowledge. Statistical investigations are used in inquiry situations across the curriculum and further learning experiences should be explored throughout the school year. Completing the statistics chapter early in the school year provides students with knowledge and skills to be used in other inquiries. Each chapter is linked to further learning opportunities in Figure it Out

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

Wilkie Way members have access to Professional Resources on the teaching of statistical thinking

### Phase 2: Year 5

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>
<b>Know: Context of Statistics</b>	
<b>Maths Literacy Development</b>	
<ul style="list-style-type: none"> <li>Assistance with learning to use specialist vocabulary</li> <li>Assistance with reading &amp; understanding math texts</li> <li>Assistance with creating and interpreting visual displays</li> </ul>	
Concepts being developed	Key knowledge being developed
<ul style="list-style-type: none"> <li>Statistical inquiry cycle</li> <li>Multi-variate data</li> <li>Quantitative data (number data)</li> </ul>	<ul style="list-style-type: none"> <li>Data displays - dot plot, stem and leaf graph, data cards</li> </ul>

<b>Maths Aotearoa Book 3A</b>	<b>Support Material available from Wilkie Way website wilkieWAY.co.nz: membership area (subscription)</b>
<b>Unit 12: Statistics</b>	<b>Teacher Professional Resources:</b>
<b>Chapter 30 Collecting and Displaying Data</b> <ul style="list-style-type: none"> <li>• Interpret information on a dot plot</li> <li>• Understand and use range, cluster, gap and outlier</li> <li>• Collect data ensuring the data is “clean”</li> <li>• Create a dot plot from their data</li> <li>• Interpret information from a stem and leaf graph</li> <li>• Create a stem and leaf graph</li> <li>• Ask and answer questions based on the data display</li> <li>• Consider questions that can be answered from a data set</li> <li>• Consider data that would need to be collected to answer questions that can't be answered from the given data.</li> </ul>	<b>Curriculum Knowledge:</b> <b>Statistics</b> Pocket Guide: Further Developing Statistical Thinking  <b>Moderation</b> Statistical Thinking Progressions Signposts 1 - 3 Statistical Thinking Progressions Signposts 3 - 6