



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

The learning experiences are taken from book 4B and work towards the progress outcomes as written for year 8 and provide foundations for work in phase 4. Statistical investigations are used in inquiry situations across the curriculum and further learning experiences should be explored throughout the school year. Completing the statistics chapters 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 3: Year 8

#### Understand: (big ideas)

- 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

#### Do (practices)

Students will have learning opportunities to:

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

#### Know: Context of Statistics

#### Maths Literacy Development

- Confidently use specialist vocabulary associated with statistics
- Confidently read & understand math texts.
- Confidently create and interpreting a wide variety of visual displays

#### Concepts being developed

- Statistical inquiry cycle
- Purpose and limitations of different data displays
- Multi-variate data
- Quantitative data (number data)
- Qualitative data (category data)
- Proportional thinking

#### Key knowledge being developed

- Variety of data displays
- Use fractions and percentages
- Importance of labels
- Importance of units of measure
- Know measures of centre and spread

<b>Maths Aotearoa Book 4B</b>	<b>Support Material available from Wilkie Way website wilkieWAY.co.nz: membership area (subscription)</b>
<p><b>Unit 8: Statistics and Probability</b></p> <p><b>Chapter 22 Working with the Data</b></p> <ul style="list-style-type: none"> <li>• Use the data inquiry cycle</li> <li>• Decide what data needs to be collected to answer questions posed</li> <li>• Calculate measures of centre - mode, median, mean</li> <li>• Calculate spread - range</li> <li>• Describe and explain clusters and outliers in the data</li> <li>• Describe and explain patterns and trends in the data</li> </ul> <p><b>Chapter 23 Using the Statistical Enquiry Cycle</b></p> <ul style="list-style-type: none"> <li>• Use the data inquiry cycle</li> <li>• Follow data driven statistical investigations</li> <li>• Follow question driven statistical inquiries</li> <li>• Read and interpret a variety of data displays</li> <li>• Identify errors in the data</li> <li>• Make comparisons within and between data displays</li> <li>• Identify features, patterns and trends</li> <li>• Draw conclusions and give reasons based on the context of the data.</li> </ul>	<p><b>Teacher Professional Resources:</b></p> <p><b>Curriculum Knowledge:</b></p> <p><b>Statistics</b> Pocket Guide: Further Developing Statistical Thinking</p> <p><b>Moderation</b> Statistical Thinking Progressions Signposts 3 - 6</p>