

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

Maths Aotearoa Book 2B provides a range of learning opportunities building onto knowledge and concepts developed in year 3. These learning opportunities enable students to achieve the outcomes expected in year 4. The teacher book also provides links to further learning opportunities in the MOE Figure it Out series available in all schools. Statistical investigations are used in inquiry situations across the curriculum and further learning opportunities should be explored throughout the school year.

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 statistical thinking

Phase 2: Year 4		
Understand: (big ideas)	Do (practices)	
As students build knowledge through their use of the mathematical and statistical processes, they begin to understand: • Patterns and variation • Logic and reasoning • Visualisation and application	Students will have learning opportunities to: Investigate situations Represent situations Connect situations Generalise findings Explain and justify findings	

Know: Context of Statistics

Problem: Use multivariate data to investigate summary and comparison situations with categorical and discrete numerical data by:

- · posing an investigative question that can be answered with data
- making conjectures or assertions about expected findings

Plan: Plan how to collect primary data to support answering the investigative question, including:

- deciding on the group of interest
- · deciding on the variable or variables for which the data will be collected
- taking account of ethical practices in data collection

Data: Use a variety of tools to collect the data and check for errors in it.

Analysis: Create and describe data visualisations to make meaning from the data, with statements including the name of the variable.

Conclusion: Choose descriptive statements that best answer the investigative question, reflecting on findings and how they compare with initial conjectures or assertions. **Statistical Literacy:** Check the statements that others make about data to see if they make sense, using information to clarify or correct statements where needed.

Maths Literacy Development

- Assistance with learning to use specialist vocabulary
- Assistance with reading & understanding math texts
- · Assistance with creating and interpreting visual displays
- See the vocabulary list in the curriculum document

Concepts being developed	Key knowledge being developed
 Statistical inquiry cycle Sorting by more than attribute Simple bi-variate data 	 Read and interpret tables of information Create tables using technical tools

Maths Aotearoa Book 2B	Support Material available from Wilkie Way website wilkieway.co.nz: membership area (subscription)
Unit 13 Working with Data Chapter 29 Sorting Data Use a table to sort information Using a word document to create a table Understand the need for headings Interpreting a table to answer specific questions Explore using a spreadsheet to create a table Explore using a spreadsheet to manipulate the data Use the statistical inquiry cycle to plan and carry out an investigation	Teacher Professional Resources: Curriculum Knowledge: Statistics Pocket Guide: Developing Statistical Thinking
Unit 5 Chapter 17 Mini Project: Off to the animal farm Unit 11 Chapter 26 Mini Project: Comparing Areas	