



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

Maths Aotearoa Book 2A provides a range of learning opportunities building onto knowledge and concepts developed in year 2. These learning opportunities enable students to achieve the outcomes expected in year 3. 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 1: Year 3

Understand: (big ideas)	Do (practices)
<p>As students build knowledge through their use of the mathematical and statistical processes, they begin to understand:</p> <ul style="list-style-type: none"> • Patterns and variation • Logic and reasoning • Visualisation and application 	<p>Students will have learning opportunities, and be guided to:</p> <ul style="list-style-type: none"> • Investigate situations • Represent situations • Connect situations • Generalise findings • Explain and justify findings

Know: Context of Statistics

Problem: Pose a summary investigative question about an everyday situation, using categorical data and discrete numerical (whole number) data, identify the variable and group of interest and articulate what the data might show.

Plan: Plan survey and data-collection questions for collecting data, identify who and what the data will measure, and discuss how the data gathering process might affect people.

Data: Collect, record and sort data or use secondary data sources provided by someone else.

Analysis: Create and make statements about data visualisation (e.g pictures, graphs, dot plots, bar graphs) for the categorical and discrete numerical data.

Conclusion: Choose from given options the statements that best answer the investigative question, reflect on findings, and compare them with anticipated outcomes.

Statistical Literacy: Identify relevant features in others' data visualisations, connect these to descriptive statements, agree or disagree with the statements, and suggest improvements to them.

Maths Literacy Development

- Assistance with learning and using 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
<ul style="list-style-type: none"> • Statistical inquiry cycle • Sorting by more than one attribute • Identifying variables 	<ul style="list-style-type: none"> • Data Displays - tally charts, pictographs, bar charts, line graphs, pie chart • Different sorting tools and displays - Venn diagrams, Carroll diagrams, yes/no trees

<p style="text-align: center;">Maths Aotearoa Book 2A</p>	<p style="text-align: center;">Support Material available from Wilkie Way website wilkieWAY.co.nz: membership area (subscription)</p>
<p>Unit 13 Working with Data</p>	<p>Teacher Professional Resources:</p>
<p>Chapter 29 Gathering and Displaying Data</p> <ul style="list-style-type: none"> • Plan the collection of data to answer a question • Collect, record and sort data • Create a bar chart • Interpret a line graph • Understand the need for labels on a visual display • Answer questions based on the data <p>Chapter 30 Sorting Data</p> <ul style="list-style-type: none"> • Identify attributes and the absence of an identified attribute • Sort qualitative data using Venn diagrams • Sort qualitative data using Carroll diagrams • Sort qualitative data using yes/no tree diagrams 	<p>Curriculum Knowledge:</p> <p>Statistics Pocket Guide: Statistical Thinking</p> <p>Moderation Statistical Thinking Progressions Signposts 1 - 3</p>