

A year of statistics at school (Years 1-3) could be

When planning a mathematics and statistics programme for the year it is important to plan for recurring opportunities for statistical investigations and for key language to be utilised.

Year Three	Term 1	Term 2	Term 3	Term 4
Progress outcomes & teaching sequence	<p><i>Support students to:</i></p> <ul style="list-style-type: none"> pose summary investigative questions about everyday situations, using categorical data and discrete numerical (whole number) data, including about identifying the variable and the group of interest, and anticipate what the data might show use survey and data-collection questions to collect data, identify who and what the data measures, and discuss how the data-gathering process might affect other people collect, record, and sort data, or use secondary data sources provided by someone else create and make statements about data visualisations (e.g., picture graphs, dot plots, bar graphs) for categorical and discrete numerical data choose statements that best answer the investigative question, reflect on findings, and compare them with anticipated outcomes identify relevant features in others' data visualisations, connect these to descriptive statements, agree or disagree with the statements, and suggest improvements 			
Longitudinal	<p>Leave your lunchbox (CensusAtSchool) By following the PPDAC cycle ākonga will have an opportunity to look at the actions taken daily, collecting data to support their ideas and impact in a positive way at school.</p>			
		<p>Survey your environment (CensusAtSchool) These lessons explore one way for ākonga to explore practical ways to answer an investigative question and begin to understand how the PPDAC cycle works. They will see the link between Citizen Science data collection and how this can be used to make generalisations that give us information about our world to help us make decisions.</p>		<p>Survey your environment (CensusAtSchool) - repeat These lessons explore one way for ākonga to explore practical ways to answer an investigative question and begin to understand how the PPDAC cycle works. They will see the link between Citizen Science data collection and how this can be used to make generalisations that give us information about our world to help us make decisions.</p>
Focus lessons	<p>Created by NZ Maths Parties and favourites (Unit of work) In this unit we conduct a number of investigations using a party or favourites as a theme. Students count, compare, organise, analyse, display and interpret data.</p>	<p>Pineapple on Pizza? (CensusAtSchool) Ākonga explore classroom preferences around pineapple on pizza. Created by NZ Maths Voting vitality (Unit of work) In this unit, which explores the context of voting, students will become familiar with and apply the five key steps of carrying out a statistical investigation. Connects to Social Studies too.</p>	Self-generated questions for a statistical inquiry in your class.	Self-generated questions for a statistical inquiry in your class.
Maintenance activities E.g. oral language rich	<ul style="list-style-type: none"> Opportunities for sorting, finding groups within groups, labelling variables and categories. Opportunities to collect and present data across the curriculum. Opportunities to discuss data across the curriculum. 			
Vocabulary	<p>PROBLEM investigative questions variable categorical variables numerical variables summary situations investigative summary questions</p>	<p>PLAN primary data survey questions conducting surveys secondary data DATA collecting data record sort data</p>	<p>ANALYSIS frequency data visualisations picture graph tally charts dot plot bar graphs analysis questions statistics describe data most common least common interpreting data</p>	<p>CONCLUSION answering investigative questions PPDAC cycle statistical enquiry cycle problem, plan, data, analysis, conclusion (PPDAC)</p>