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 One	Term 1	Term 2	Term 3	Term 4
Teaching sequence outcomes	*Support students to:* • pose summary investigative questions about a group and for which the data will have categorical variables that classify objects or individuals into groups or categories (e.g., colour, brand), and anticipate what the data might show • collect data for one variable by making observations or questioning others, and discuss how the data-gathering process might affect other people • collect categorical data for one variable • create and make statements about data visualisations (e.g., picture graphs, physical dot plots) for categorical data, giving the frequency for each category • choose statements that best answer the investigative question • agree or disagree with others' statements about simple data visualisations (e.g., picture graphs, physical dot plots)			
Longitudinal activity	Fabulous Feet (CensusAtSchool) This lesson explores one way for ākonga to explore practical ways to answer an investigative question about foot length. By doing this in a practical way they will begin to understand how the PPDAC cycle works to give us information about our world. Term 1: Do the lesson (keep the paper feet!) Terms 2-4: Revisit and remeasure.			
Focus lessons	Cats and Dogs (CensusAtSchool) This lesson uses the PPDAC cycle to explore an investigative question that will appeal to Year One ākonga. Kaiako can take the lesson further by following the ideas provided to make this lesson into a series of lessons. Created by NZ Maths I like toys (Unit of work) In this unit we explore ways to pose and answer investigative questions about our favourites by gathering and analysing data and discussing the results.	Pizza Party (CensusAtSchool) A statistical enquiry aimed at Year 1 ākonga, around designing pizza toppings for a pizza party. This lesson has strong literacy links to the letter p. Created by NZ Maths Healthy hands (Unit of work) The purpose of this unit is to conduct a statistical investigation to answer a health question such as, "does washing my hands keep me from getting sick?"	Carry Your School Bag (CensusAtSchool) This lesson explores an everyday context using the PPDAC cycle to show ākonga that statistical ideas are everywhere, and we can collect data to answer questions that are interesting to us. Created by NZ Maths Asking about shoes (Rich mathematical activity) The purpose of this activity is to engage students in setting up for a statistical investigation by posing a question within the context given. Not enough drawers (Problem solving) This problem is about being able to sort everyday objects into categories.	Self-generated questions for a statistical enquiry in your class. Created by NZ Maths Christmas Tree (Problem solving) This problem involves sorting objects into categories and then counting them. The Garden (Problem solving) This problem involves sorting objects into categories and then counting them.
Maintenance activities E.g. oral language rich, E.g. in play-based learning	Opportunities to make use of comparative language. - Bigger, smaller, the same as, most, least Collecting weather data daily.	Opportunities to sort items into categories (buttons, loose parts, leaves, twigs...) The same as, more, less, colours, shapes, category, data, preference, Collecting weather data daily.	Opportunities to find groups within groups during sorting activities. Collecting weather data daily.	Sorting, comparing and stating findings. Collecting weather data daily.
		Preschool Data Toolbox Collect data, create graphs, and analyse your findings in the *Preschool Data Toolbox* app! Choose one of six investigations with preschool-appropriate research questions or create your own investigations and turn them into a data story. These data collection and analysis activities help children to engage in meaningful mathematics while developing computational thinking and problem-solving, communication, and inquiry skills.		
Vocabulary	**PROBLEM** variable categorical variables	**DATA** collect data record multivariate data sort data [into categories]	**ANALYSIS** data visualisations (graphs) picture graph counts most popular/common least popular/common	**PPDAC cycle** problem, plan, data, analysis, conclusion (PPDAC)