

## Mathematics – Statistics and Probability: Foundation – Level 6



Foundation Level	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Statistics and Probability						
	Chance					
	Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'	Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results	Describe possible everyday events and order their chances of occurring	List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions	Describe probabilities using fractions, decimals and percentages
				Identify everyday events where one cannot happen if the other happens	Recognise that probabilities range from 0 to 1	Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies
				Identify events where the chance of one will not be affected by the occurrence of the other		Compare observed frequencies across experiments with expected frequencies
Data representation and interpretation						
Answer yes/no questions to collect information	Choose simple questions and gather responses	Identify a question of interest based on one categorical variable. Gather data relevant to the question	Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording	Select and trial methods for data collection, including survey questions and recording sheets	Pose questions and collect categorical or numerical data by observation or survey	Construct, interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables
Organise answers to yes/no questions into simple data displays using objects and drawings	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays	Collect, check and classify data	Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies	Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values	Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies	Interpret secondary data presented in digital media and elsewhere
Interpret simple data displays about yes/no questions		Create displays of data using lists, table and picture graphs and interpret them	Interpret and compare data displays	Evaluate the effectiveness of different displays in illustrating data features including variability	Describe and interpret different data sets in context	Pose and refine questions to collect categorical or numerical data by observation or survey
Achievement Standard						
Students sort familiar categorical data into sets and use these to answer yes/no questions and make simple true/false statements about the data.	Students describe data displays. They ask questions to collect data and draw simple data displays. Students classify outcomes of simple familiar events.	Students collect data from relevant questions to create lists, tables and picture graphs with and without the use of digital technology. They interpret data in context. Students use everyday language to describe outcomes of familiar events.	Students carry out simple data investigations for categorical variables. They interpret and compare data displays. Students conduct chance experiments, list possible outcomes and recognise variations in results.	Students describe different methods for data collection and representation, and evaluate their effectiveness. They construct data displays from given or collected data, with and without the use of digital technology. Students list the probabilities of everyday events. They identify dependent and independent events.	Students pose questions to gather data and construct various displays appropriate for the data, with and without the use of digital technology. They compare and interpret different data sets. Students list outcomes of chance experiments with equally likely outcomes and assign probabilities as a number from 0 to 1.	Students interpret and compare a variety of data displays, including displays for two categorical variables. They analyse and evaluate data from secondary sources. Students compare observed and expected frequencies of events, including those where outcomes of trials are generated with the use of digital technology. They specify, list and communicate probabilities of events using simple ratios, fractions, decimals and percentages.

