

Line Graph

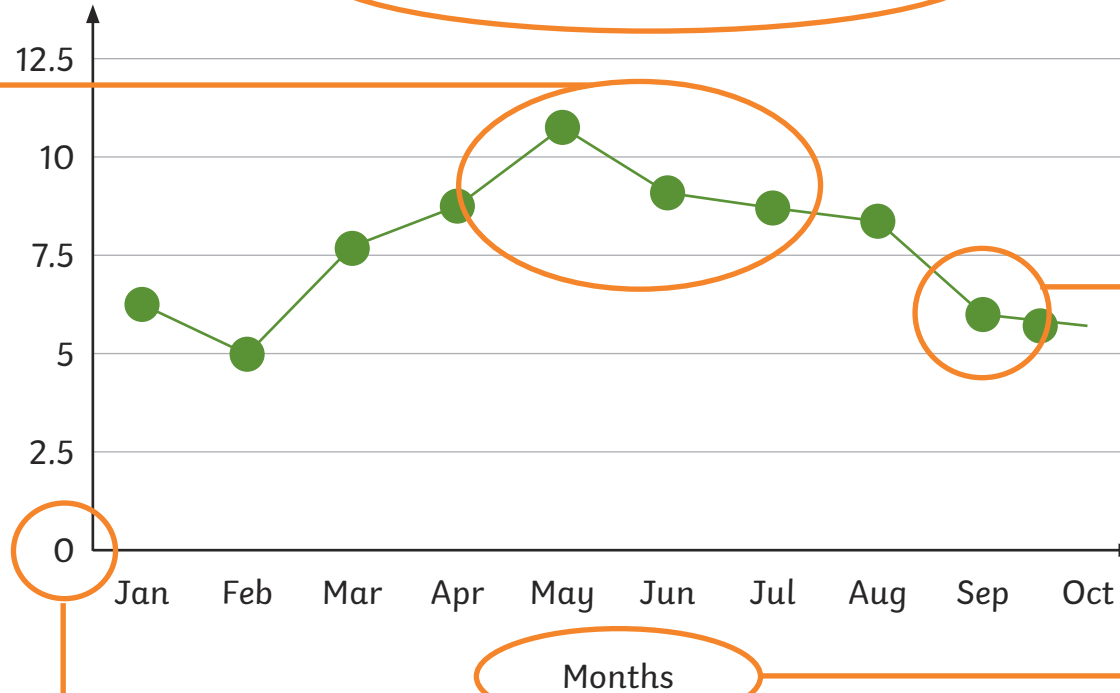
A line graph displays continual data over a period of time using points to show each result and lines to connect them. This graph is best used to show how a variable changes over time, such as temperature and rainfall.

The lines connecting each point show the changes over a period of time, with lines going up showing an increase and lines going down showing a decrease.

The label used on the y-axis should represent the dependent variable and include a unit when necessary.

Rainfall (cm)

The value of the where the y-axis meets the x-axis should be zero.



Average Monthly Rainfall in Auckland

The title should summarise what the graph is about. This usually includes references to the x-axis variable and the y-axis variable.

Each point represents a piece of data.

The label used on the x-axis should represent the independent variable and include a unit when necessary.

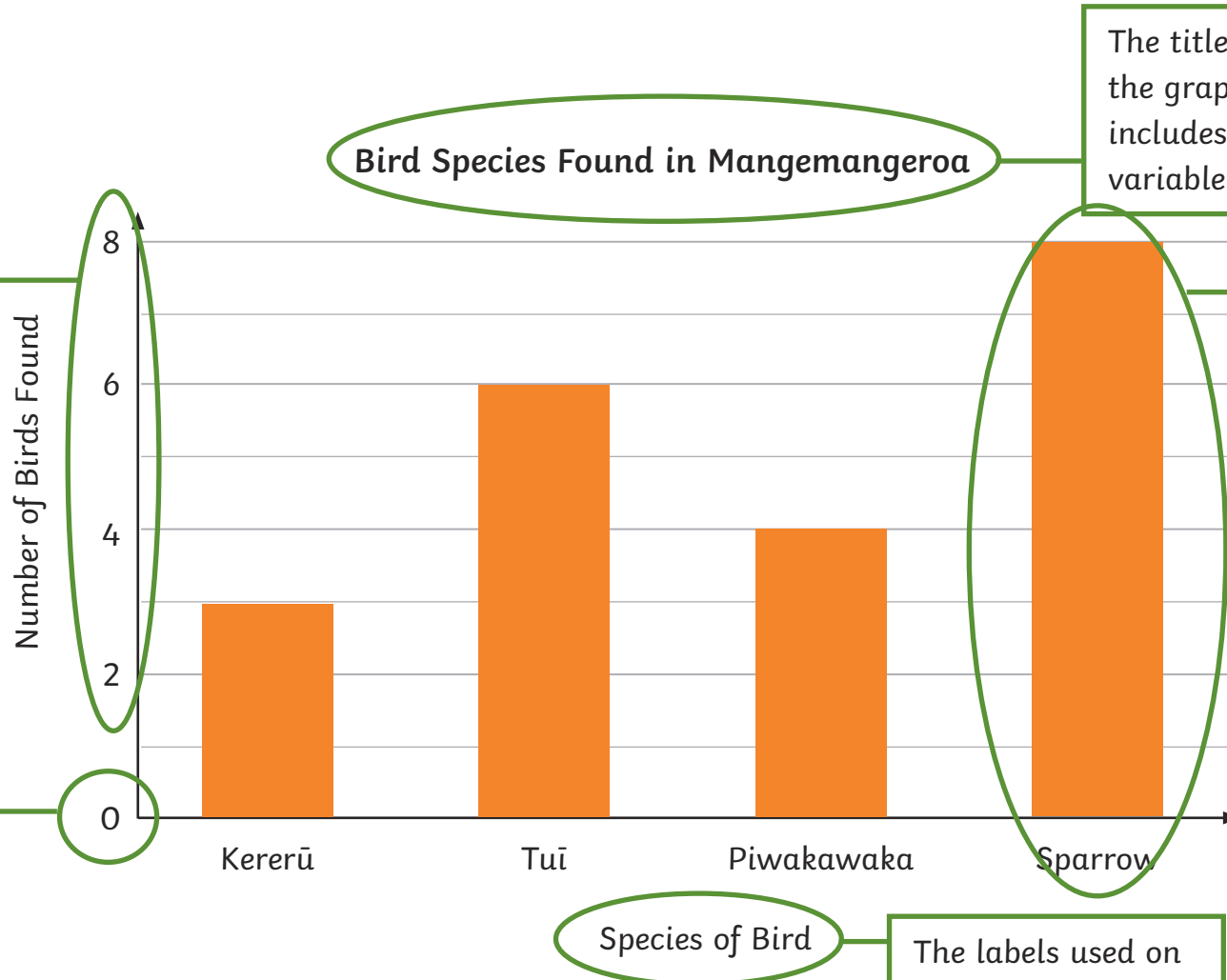
Months

Bar Graph

A bar graph compares different groups or categories and is best used when the data displayed is not continuous, or you are not trying to find patterns over time. For example, if you are counting the number of birds in an area, each species would be in its own category.

The labels used on the y-axis are the number of times a certain trait or group has been observed.

The value of the where the y-axis meets the x-axis should be zero.



The title should summarise what the graph is about. This usually includes references to the x-axis variable and the y-axis variable.

All the bars in a bar chart need to be the same width and width apart. The bars can be displayed horizontally or vertically. The bars display data for each category. Some bar graphs have two or more bars for each category. The higher the bar, the more times a trait or group has been observed.

The labels used on the x-axis are the different groups being observed.

Scatter Plot

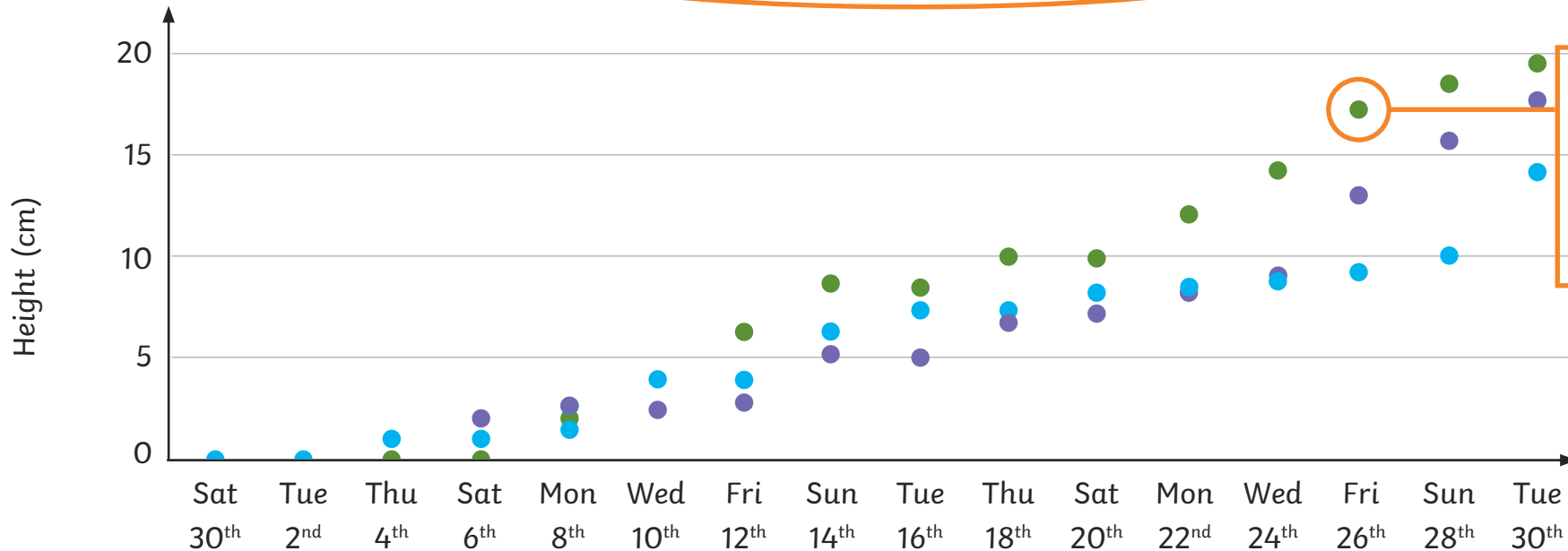
Scatter plots are similar to line graphs in that they show continuous data over a period of time. The difference is that they compare changes in two different variables at the same time. For this reason, scatter plots are great for showing the connection between two continuous variables, like height and weight.

Seed Growth Over One Month

The legend describes what each coloured point represents.

● Sunflowers ● Cornflowers ● Cosmos

The title should summarise what the graph is about.



Each point represents a piece of data from an observation.

Date

A scatter plot shows the relationship between two variables. For example, this graph shows the relationship between time and the growth of three types of seeds.

The independent variable is usually placed on the x-axis. If there is no independent variable, either variable can be placed here.

Pie Chart

Pie charts look like a circle divided into sections representing different parts of one whole. They are used to show one moment in time rather than changes over a longer period of time.

