

Gathering and interpreting data - Year 6 Term 5

Interpreting Data

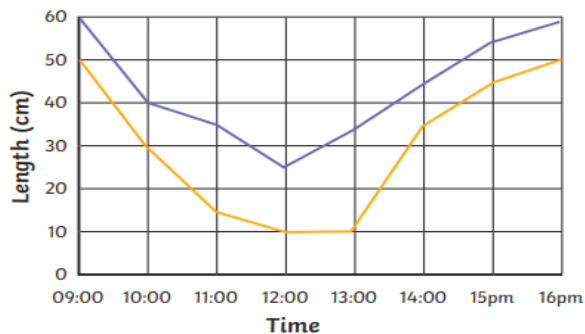
Information can be shown in tables, charts or graphs. Interpreting data simply means understanding or working out what is being shown by a table, graph or chart and being able to answer questions about that information.

Line Graph

Line graphs are used to show changes to a measurement over time.

Data shown in a line graph is continuous. Sets of points are joined together to make the line.

A line graph to show the length of shadows over time



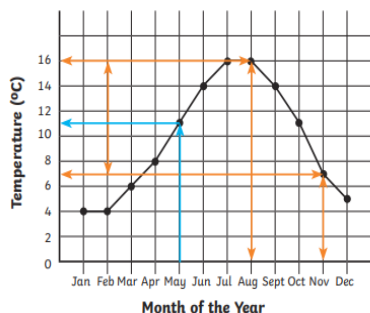
April

May

Here is a line graph showing the average temperature for each month.

The y-axis shows temperature in intervals of 2°C on a scale of 0°C to 16°C.

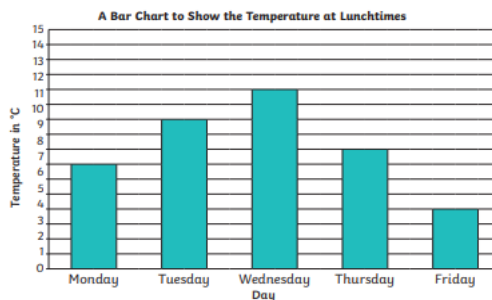
The points show the average temperature for each month.



The x-axis shows the months of the year.

Bar Chart

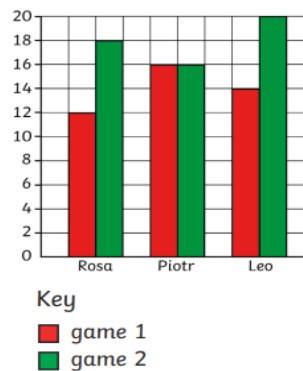
A bar chart has a horizontal axis and a vertical axis. Bars show the data value of each category. There must be a gap between each bar. The scale of the bar chart is chosen based on the data range.



Dual Bar Charts

A dual bar chart compares two sets of related data. The bars can be vertical or horizontal.

Three children play 2 games and record their scores. Both Rosa and Leo scored more in the second game than in the first one.



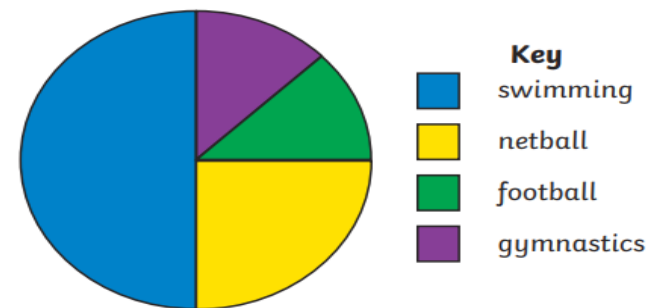
Key
■ game 1
■ game 2

Pie Charts

Pie charts represent discrete data.

A circle is divided into segments, where each segment represents a data category. The size of each segment matches its proportion of the total amount.

A pie chart to show children's favourite sports



24 children were asked in total.

Swimming = $\frac{1}{2}$ so $\frac{1}{2}$ of 24 = 12 children

Netball = $\frac{1}{4}$ so $\frac{1}{4}$ of 24 = 6 children

Football = $\frac{1}{8}$ so $\frac{1}{8}$ of 24 = 3 children

Gymnastics = $\frac{1}{8}$ so $\frac{1}{8}$ of 24 = 3 children

Mean Average

The mean is the average of a set of data.

To find the mean or average, add up all of the values to find the total. Divide the total by the number of values that you added together. This will give you the mean.

12	15	10	8	15
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$$12 + 15 + 10 + 8 + 15 = 60$$

$$60 \div 5 = 12$$

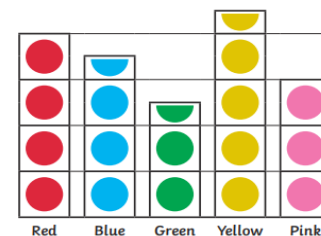
The mean of this data is 12.

Pictograms use symbols or pictures to represent data.

This pictogram uses one symbol to represent two children.

Using this key, we can see that seven children prefer the colour blue.

Class 10's Favourite Colours



○ = 2 Children