

Statistics Knowledge Organiser





Y4


Maths

Pictograms

Pictograms use symbols or images to represent data.

This pictogram shows the number of different flowers found in a school playground.

Flower	Number of flowers
Daffodil	
Tulip	
Sunflower	
Daisy	

Key:  = 10 flowers

You must use the key to determine the amount each image represents.

Using this key, the data shows that there were 25 daffodils in the school playground.

Continuous and discrete data.

Discrete data can be represented using bar charts, tally charts and pictograms. Discrete data can be counted.

Continuous data such as height, weight, temperature and length can be represented using line graphs which are often used to show a changes over time. The continuous data is measured so it can take any value.

For example:

Discrete data (count) - glasses of water, tins of cat food or shoe size.

Continuous data (measure) - volume of water (ml), mass of cat food (kg) and length of your foot (cm).

Comparison, sum and difference questions.

Comparison - Finding an amount that is less than or greater than a number.

Sum - The total of two or more amounts.

Difference - The amount by which something greater or smaller.

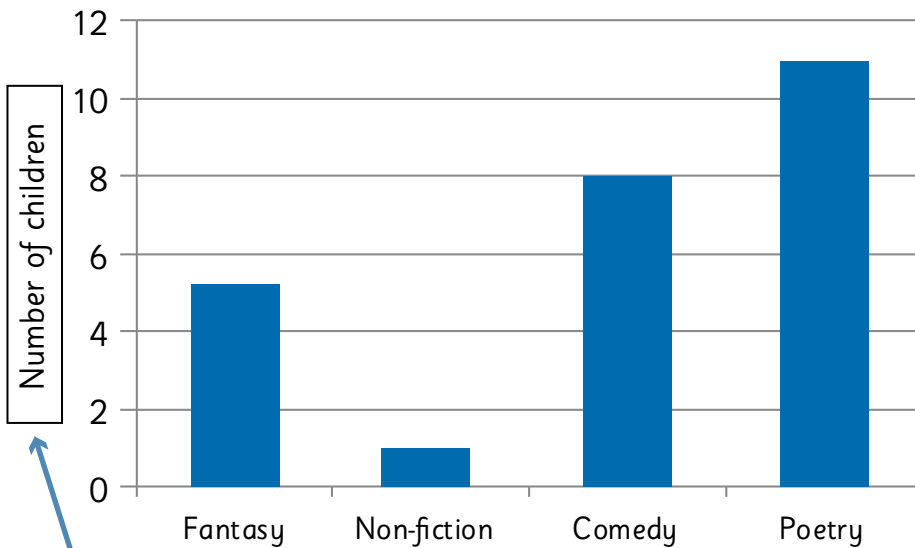


Bar Charts

Bar charts can be used to represent discrete data which is displayed using bars.

A bar chart needs a title to show the data it represents.

Children's favourite book genres



Number of children

Book genre

The axes must be labelled.

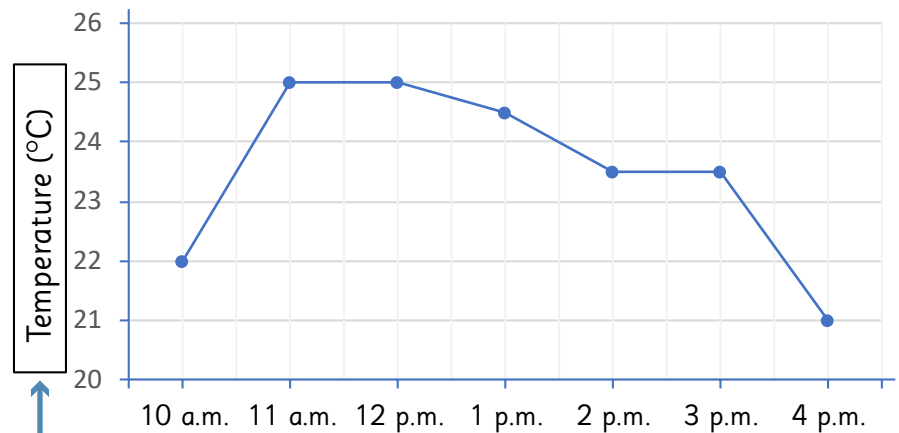
Line Graphs

Line graphs can be used to spot patterns over time and can be used to estimate values where there is not a definite reading.

An appropriate scale is used depending on the measure of the data recorded.

The title indicates the information shown in the graph.

Room temperature



Temperature (°C)

Time

The axes are labelled, and the x-axis always shows the duration of time whether that be years, months, weeks, days, hours, minutes, seconds etc.

It is plotted as a number of points, which may be joined with straight lines.

