



STATISTICS



KNOWLEDGE ORGANISER

Overview



Statistics we learn to:

- Interpret Charts
- Compare/ Find the sum/ Find the difference
- Understand Line Graphs

This learning is important because...

...it helps us to read and understand information. We can make use of information to answer important questions. It also helps us to think critically to solve problems.

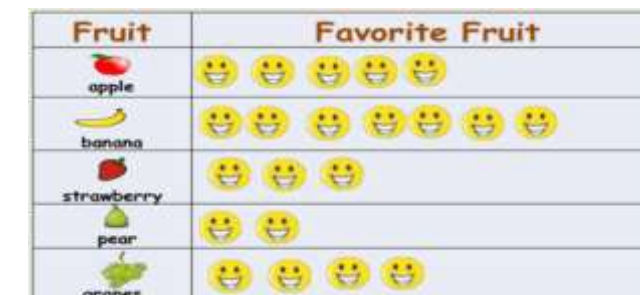
Pictograms

Pictograms use pictures or symbols to show data.

The key shows us how much each symbol represents.

KEY

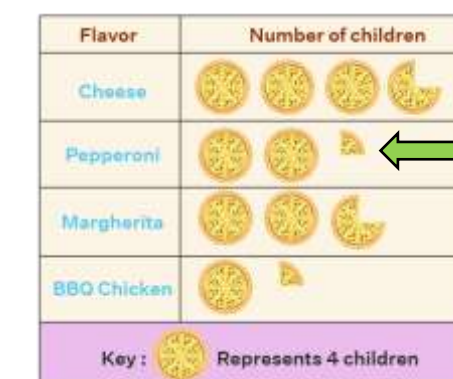
= 1 child



In this pictogram, one symbol represents four children.

This helps the pictogram creator to fit more data onto a smaller, simpler pictogram.

The key helps to show us how many children chose each flavour, e.g. 5 children chose BBQ chicken.



1 child is represented by a quarter of a pizza, 2 children by half a pizza, etc.

Tally Charts and Tables

-Tally marks are a useful way of tracking scores. Tally marks look like those shown on the right. The first four marks are straight vertical lines. The fifth line goes across diagonally, like a gate.



-Tally charts are one way of collecting data with tally marks.

-The tally chart on the right shows different transport methods to and from school for children in a class.

Transport	Tally	Frequency
Walk		13
Bus		7
Car		4
Bike		5
Train		1

-The frequency column is completed after all the data has been collected.

-Tables need to have clear titles and headings so that we can understand the data.

-The table on the right shows the different medals won by each country.

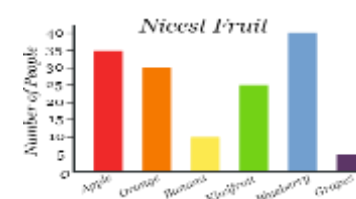
-Using this table, we can see that Kenya won the most gold medals, but Japan won the most medals in total.

Table showing the number of medals won

Country	Gold	Silver	Bronze	Total
Brazil	9	20	9	38
Egypt	7	16	10	33
Japan	8	16	19	43
Kenya	11	3	16	30
Norway	8	14	14	36
Thailand	6	23	2	31

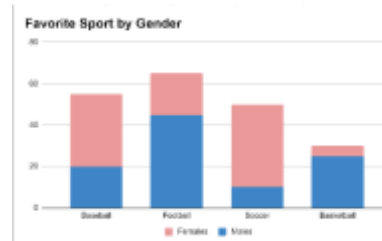
Bar Charts

-Bar charts show us the data in each category by using rectangular bars. They have a horizontal axis (across) and a vertical axis (running up and down).



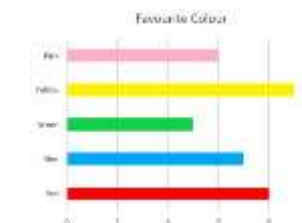
-Remember that there should be a space between each bar.

-The scale for each bar chart can change depending on the range of data. The bar chart on the left uses a scale of 5.



-Stacked bar charts show two sets of data. The example on the left shows the favourite sports of females and males.

-Some bar charts can have horizontal bars (see right).



Key Vocabulary

Data

Tally Chart

Bar Chart

Frequency

Table

Continuous

Discrete

Horizontal Axis

Vertical Axis

Scale

Difference