NUMERACY

Drawing a graph

A **graph** is a picture designed to express words, particularly the connection between two or more quantities. Graphs make information easier to see. Scientists and engineers use graphs so that they can get a better understanding of the broad meaning and importance of their data. Salesmen and businessmen often use graphs to add importance to their points in a sales or business presentation.

Hints

WORD BANK

Axis - A fixed, reference line from which locations, distances or angles are taken. Usually grids have an x-axis and y-axis.

Data - A collection of facts, such as numbers, words, measurements, observations.

Scale - The intervals that are used on a graphical representation of data

e.g. a scale which rises in ones or in tens, etc.

Tips for drawing graphs – Remember SLURP

S is for SCALE. You must use an EVEN scale for the X and Y axis e.g. if two lines represent 5 on my scale, the next two lines must be 10.

L is for LABEL your X- and Y- axis. The factor you are changing is on the x-axis. The factor you are measuring is on the y-axis.

U is for UNIT. If a variable has a unit of measurement, it must be added to your label in brackets e.g. Distance (cm) or Age (years)

R is for RULER. Your graph should be drawn carefully and neatly with a ruler!

P is for PLOT. Plot your data points on your graph using a PENCIL.

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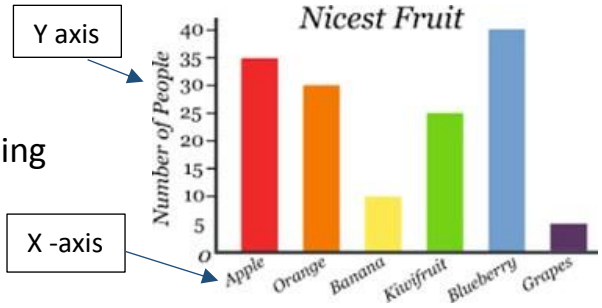
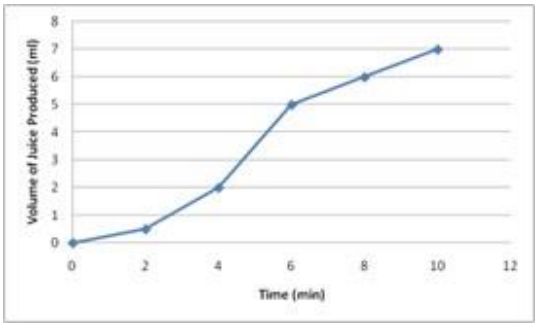
Examples

There are three main types of graphs :

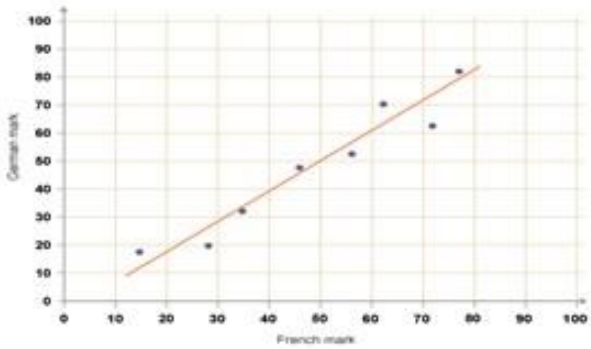
1. Bar Graph: Use this graph if the variable you are changing can be sorted into different categories.



2. Line Graph: Use this graph if the variable you are measuring shows a range of values changing over time.



3. Scatter Graph: Use this graph if you want to look at the relationship between two sets of variables. In this example, a line of best fit has been drawn.



Resources

Step by step guide :

https://owlcation.com/stem/How-to-Draw-a-Scientific-Graph

Youtube tutorial :

https://www.youtube.com/watch?v=n2YkbdNORp8