

Graphing Data

DEFINITION OF A GRAPH

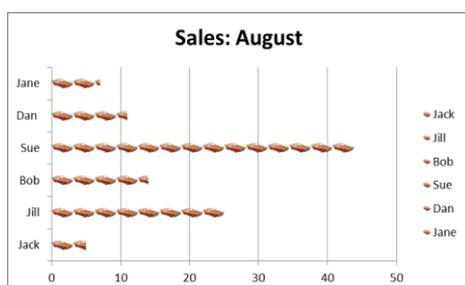
When you think of illustrations, you think of a cartoon or a comic book, but a graph is an illustration too. Except, instead of illustrating a creative concept or personal opinion graphs illustrate facts and figures – otherwise known as data.

Graphs come in many shapes and sizes, but at the end of the day they are simply visual tools for expressing measurable data.

TYPES OF GRAPH

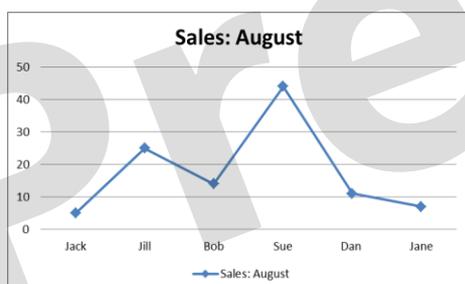
- **Pictograph**

Pictographs are simply graphs which display data using picture symbols, making them popular for communicating the 'big picture' to a large audience very quickly. However, they are not a good tool to use for displaying detailed analysis, which is why they are rarely used in anything but presentations to the public or an audience who have to understand the topic quickly. For example, you will rarely find a pictograph in an academic report. The pictograph below is in the context of a monthly sales chart at a car yard.



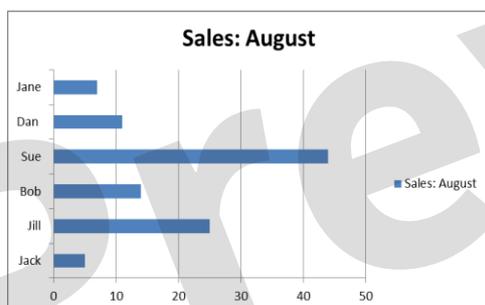
- **Line Graph**

Line graphs are perhaps the most common form of graph, used by everyone from scientists to salespeople to depict the improvement or decline in a field of data. The pictograph above becomes:



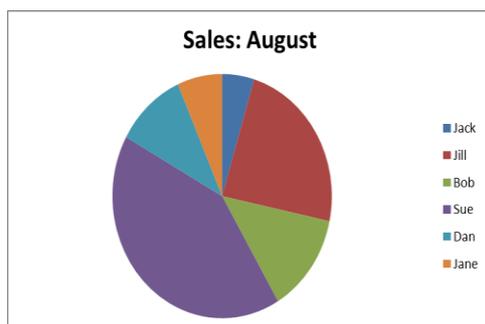
- Column/Bar Graph

A close relation to the line graph, the ease of communication of a bar graph makes it ideal for presenting comparative data over a period of time. Vertical bar graphs – as opposed to the horizontal graph below - are often referred to as Column graphs.



- Pie Graph

Pie graphs are simply a visual representation of percentages, so if the car yard were to look at the total sales for the month of August and break the sales team's success down into individual percentages, it would look like this:



- Other types of graph

Flow Charts: Instead of presenting sets of data, flow charts are used to communicate a set process. Businesses use them as step-by-step guides in carrying out projects.

Organisational Graph: An organisational graph is much like a family tree graph, but in the context of business it is used to visualise the hierarchy of a company's staff or departmental structure.

USE OF GRAPHS

There is a time and a place for graphs, but it depends on the audience. Graphs are great for the quick communication of facts, which is why they are often used in business plans or presentations to investors who may see many such plans or presentations in a day or a week. Graphs make the communication of data easier, quicker and in many cases more memorable. However, the over-use of graphs compared to text in a presentation can often simply look lazy, as if in-depth analysis hasn't taken place.