

If you have a table of information, it can often be useful to view it using a **chart** or **graph**. Spreadsheets can create charts very simply.

What are the main parts of a chart? It depends on the chart type:

A **bar**, **line** or **scatter chart** should have the following:

- Chart Title, x-axis Label, y-axis Label *and possibly a Legend.*

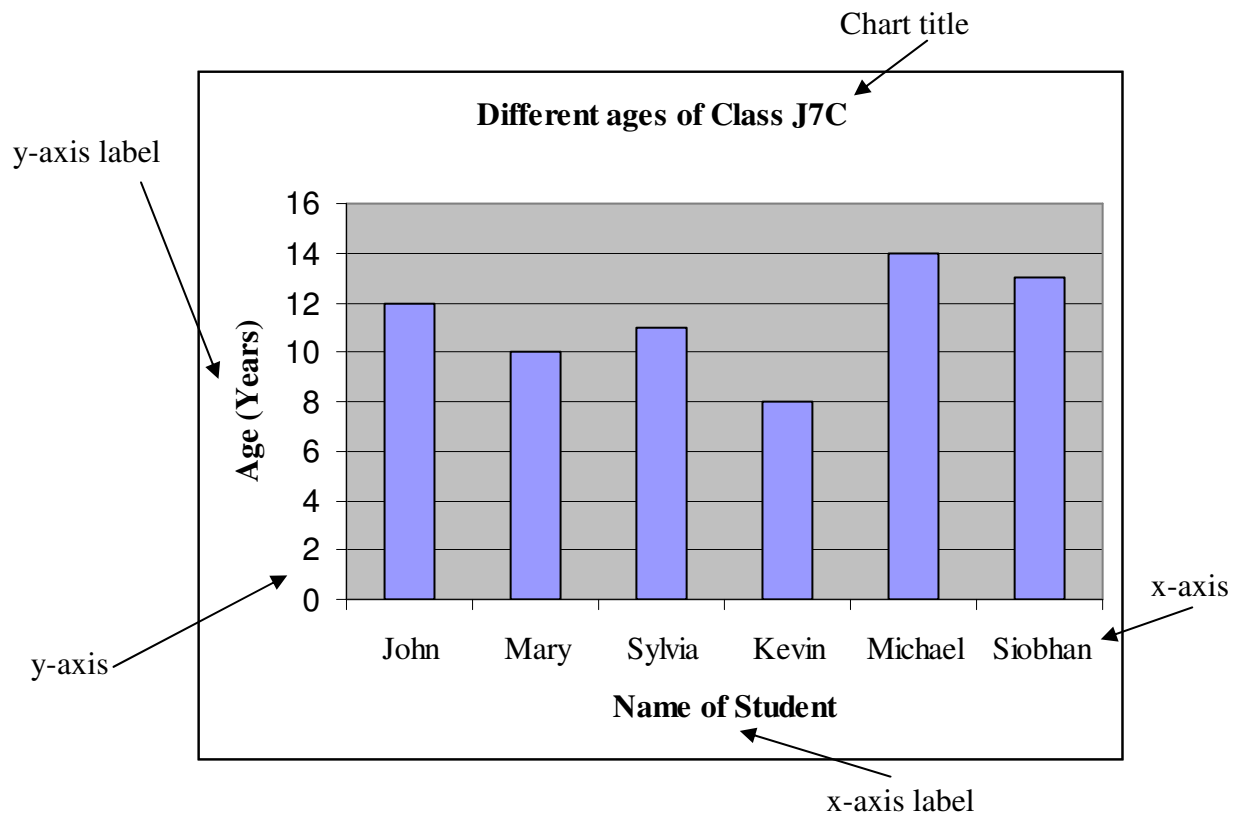
*Use a legend if your chart has more than one line of information. If it only has one, then you don't need a legend.*

A **pie chart** should have the following:

- Chart Title, Legend

### **Example Bar Chart**

This bar chart shows the age of each student in class J7C.



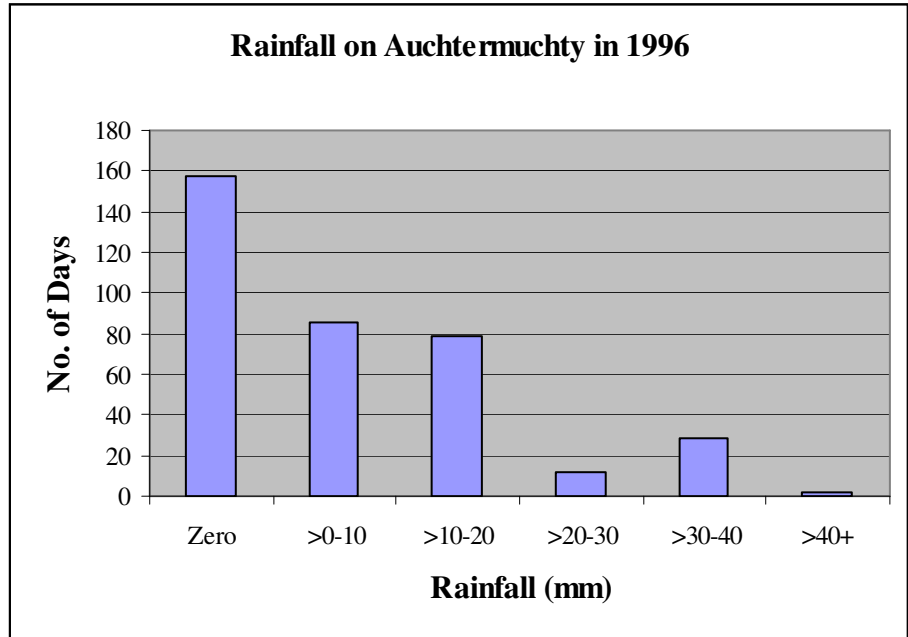
A proper chart should always have a **meaningful title**.

**Task 1 - It's raining again in Auchtermuchty...**

During 1996, a weather station in Auchtermuchty recorded the amount of rainfall each day (it rains a lot in Auchtermuchty). Create a bar chart using the following data:

Rainfall(mm)	Days
Zero	157
>0-10	86
>10-20	79
>20-30	12
>30-40	29
>40+	2

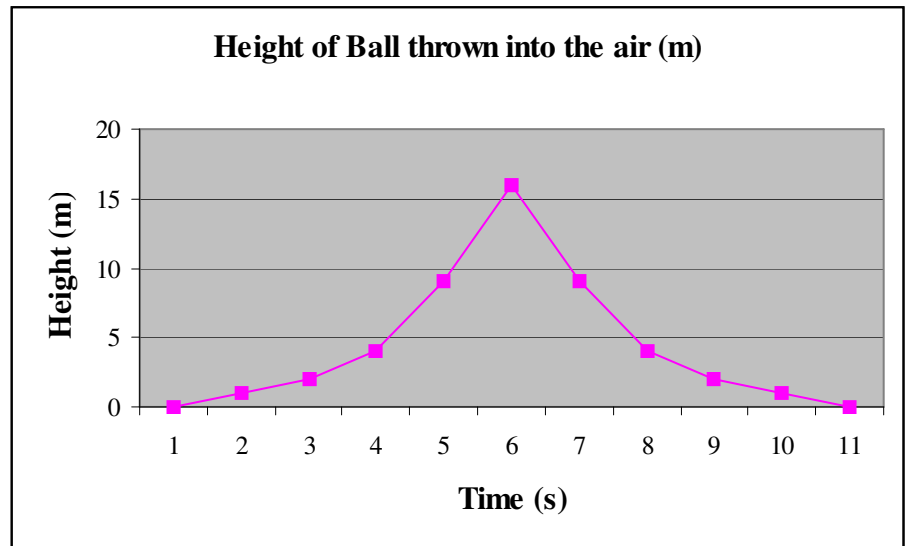
You may need to change the scale on the y-axis so that it starts at 0, ends at 200 and increases in steps of 20.



**Task 2 - Up it goes...**

In a physics experiment, a ball is thrown into the air and its height is measured every ½ second. Create a line graph from the following data:

Time (seconds)	Height of ball (m)
0	0
0.5	1
1	2
1.5	4
2	9
2.5	16
3	9
3.5	4
4	2
4.5	1
5	0



**Hint:**

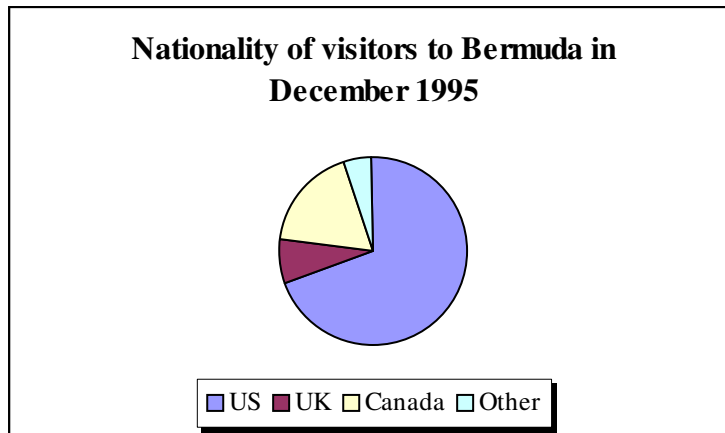
When you create this graph, the spreadsheet will give you two lines: one line for the time and one line for the height. *You only want to see the line for the height.*

**Task 3 - Come to Bermuda!**

Using the following information (Taken from the Royal Gazette), create **two** separate pie charts which show the breakdown of visitors to Bermuda in December 1995.

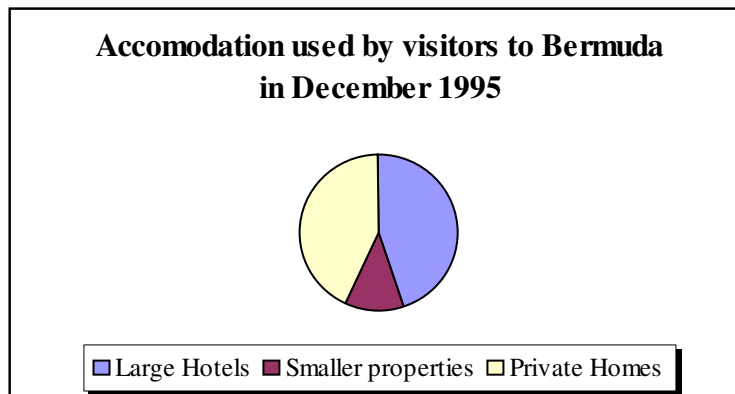
The first pie chart should show a breakdown of visitors according to their nationality:

Country	Number of Visitors
US	11,250
UK	1,270
Canada	2,972
Other	829



The second pie chart should show a breakdown of visitors according to the type of accommodation they stayed in.

Accommodation	Number of Visitors
Large Hotels	7,234
Smaller properties	2,050
Private Homes	7,037

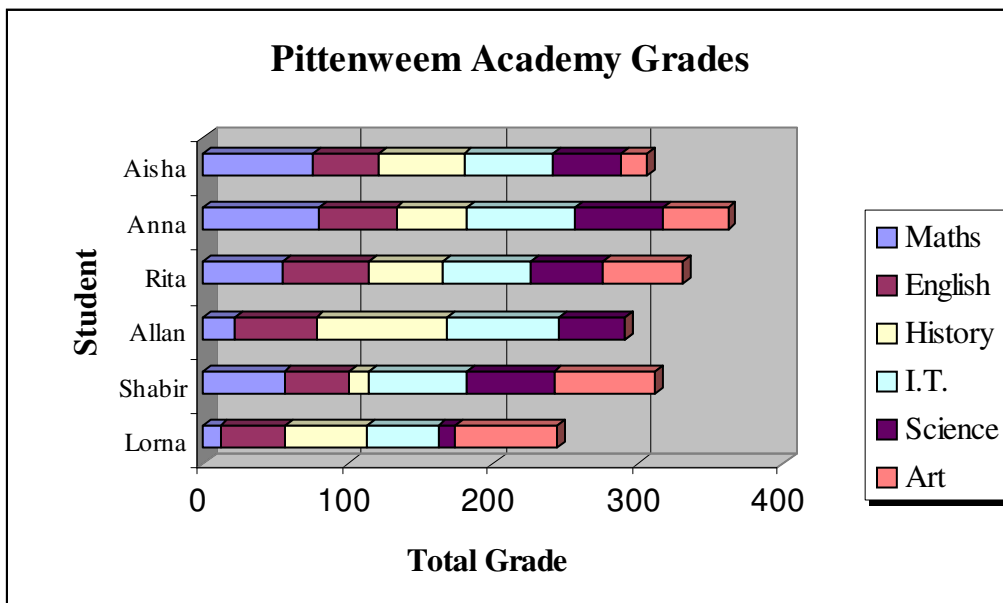


**Task 4 - Class marks...**

Students at Pittenweem Academy have just finished a group of tests. The results were as follows:

	Lorna	Shabir	Allan	Rita	Anna	Aisha
Maths	12	56	22	55	80	76
English	45	45	56	60	53	45
History	56	14	90	51	49	59
I.T.	49	67	78	60	75	61
Science	12	60	45	50	60	47
Art	70	70	0	55	45	18

Create a horizontal stacked bar chart that shows the total grade for each student. It should look like this:



**Hint:**

When you create a horizontal chart, the spreadsheet **flips** the axes, i.e. the vertical axis becomes the x-axis and the horizontal axis becomes the y-axis.

This only happens with a horizontal graph.