
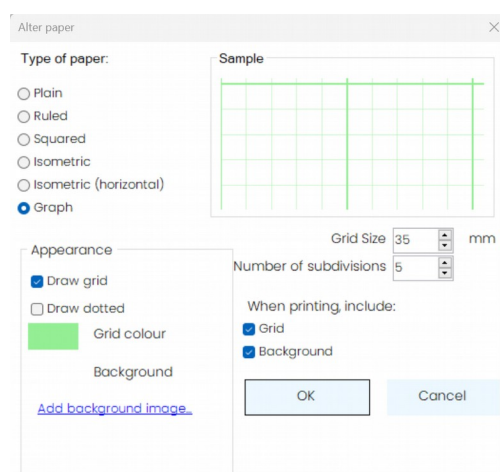


4. Secondary Graph Drawing

The Graph Activity

Here you can create bar charts, line graphs and pie charts.

Before starting, check that you have the correct graph paper on the workspace. Select the Edit Paper button . Now you can choose whether to have squared, isometric or graph paper and you can choose the grid size. You can also change the grid and background colour. Select “OK” when you have finished your selection.

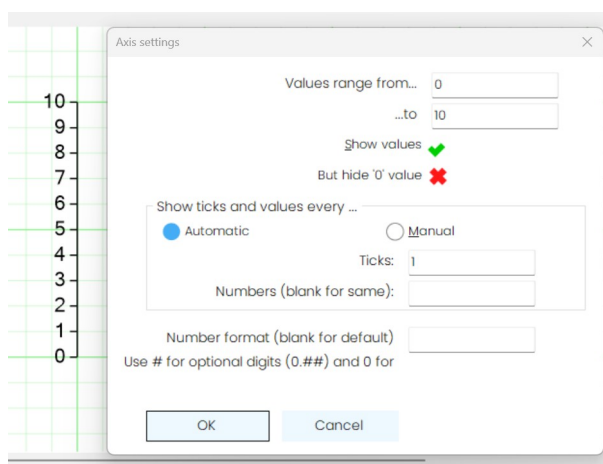


The **Graph Axis Tool** (I) can be used to create a vertical or horizontal axis with the numbers automatically in place. Alternatively the **Line Tool** (SH+L, L) can be used to draw a blank axis.



Make sure Snap to Grid is on so that the axis line fits onto the grid lines accurately

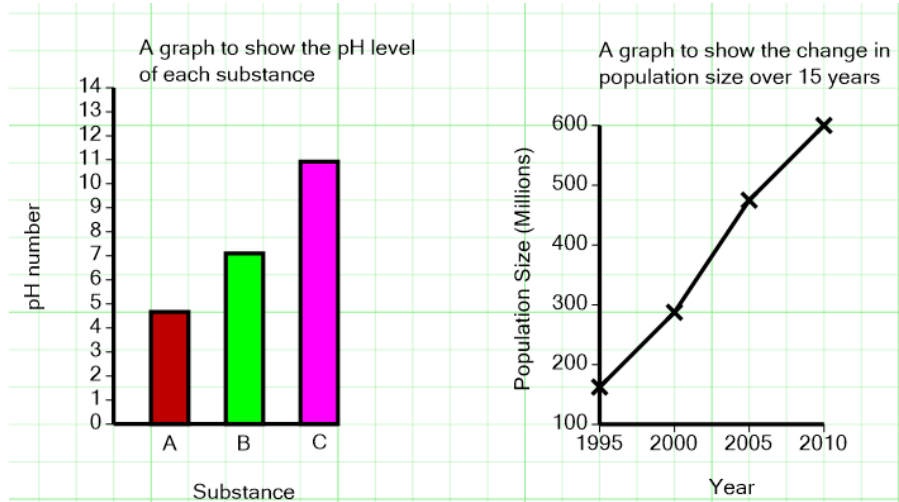
The graph axis sets out numbers 1 – 10 but this can be changed. Double click on the graph axis you have drawn. This will open up the graph axis editing box:



You can change the range of values and whether the axis shows every second or fifth number etc. You can decide whether to remove some numbers and you can use decimal numbers.

If you are using the graph axis to create a bar chart, it is best to use the **Rectangle Tool (R)** to set out the bars. Remember to keep snap to grid on and it is best to start your bar at the bottom. If you need to place the top of the bar between the grid lines, start the rectangle with snap to grid on and then turn it off before completing the rectangle.

If you are creating a line graph use the **Marker Tool (Sh+M)** to create points which can then be joined together using the **Line Tool (L)** . Select the 'Point Style' palette to change the style of the marker.



Use the **Writing Tools** to add labels: choose the **T tool** to write horizontally – e.g. for the title, or the **W tool** will write in any direction – e.g. for the axis, or select the **Sh+W tool** to write within a shape.

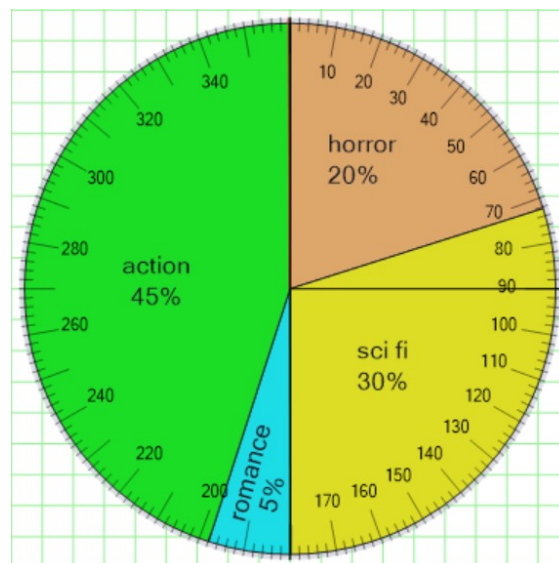
Pie Charts (Sh+O)

Select the **Pie Chart Tool (Sh+O)** and left click where you would like the centre of the pie chart to be.

Left click again where you want to start the first slice.

Keep moving and clicking to add more slices and double click to finish when you are reach you first slice.


You may want to place the **Protractor (Sh+P)** onto the workspace first for accuracy when creating each slice. To do this make sure 'Snap to Shape' is selected.





Editing the pie chart:

Select the **Fill Tool** (Q) then choose the colour you want on the right side of the screen, then left click on the slice of the pie chart you want to change.

The fill palette has a “rainbow” option  which will give each new slice a different colour. The colours are then selected randomly each time you colour difference sections of the pie chart.

Add text to the pie chart using the **Writing Tools** (Sh+W, or T, W).