



Bar graphs are used when there are numbers on the y axis only.

Which axis?

- The first column in the results table always goes on the x (bottom) axis as this is the independent variable. In a bar graph this is usually words.
- The second column in the results table always goes on the y (up and down) axis as this is the dependent variables and what has been measured to gain the results

X axis scale

- The categories in the results table form the scale for the x axis
- You should copy the entries in the table exactly without shortening any words

Y axis scale

- Scales must go up by the same amount each time to form a regular scale  
e.g 0, 2, 4, 6, 8, 10 NOT copied from the table such as 3, 6, 7, 8, 10
- The scales should go up in 1s, 2s, 5s or 10s to make it easier to accurately plot the points
- To work out your scale look at the biggest value and the smallest value and ensure your scale starts below the smallest value and finishes above the highest value
  - Try each scale option to see which one fits
- Your scale should use at least half of the graph paper provided

Labels

- Labels must be copied exactly from the headings in the table
- Remember to take the units for the y-axis too

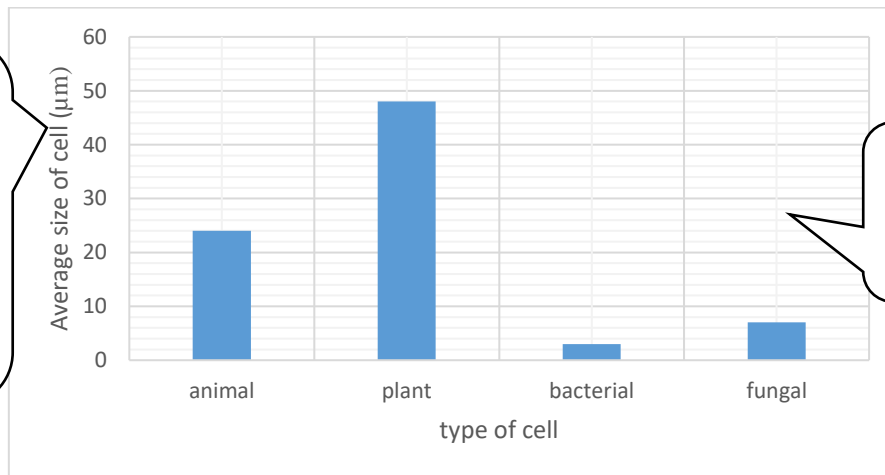
Drawing the bars

- Each bar must have a clear bar top
- Bars do not need to be shaded in, coloured in or have a pattern
- The width of the bars does not matter
- Take your time to ensure the bar top accurately drawn

*Example*

*Plot a bar graph to show the average size of cells shown in the table*

X-axis <i>Type of cell</i>	Y-axis <i>Average size of cell (µm)</i>
Animal	24
Plant	48
Bacterial	3
Fungal	7



Scale is regular as it goes by 10 each time which makes each little box a value of 2.  
Label from the table and includes units

Each bar has a clear bar top and has been accurately plotted

Each label for the bars matches the entries in the table exactly  
Label matches heading from the table