

# BGE Skills Workshop

Line Graphs

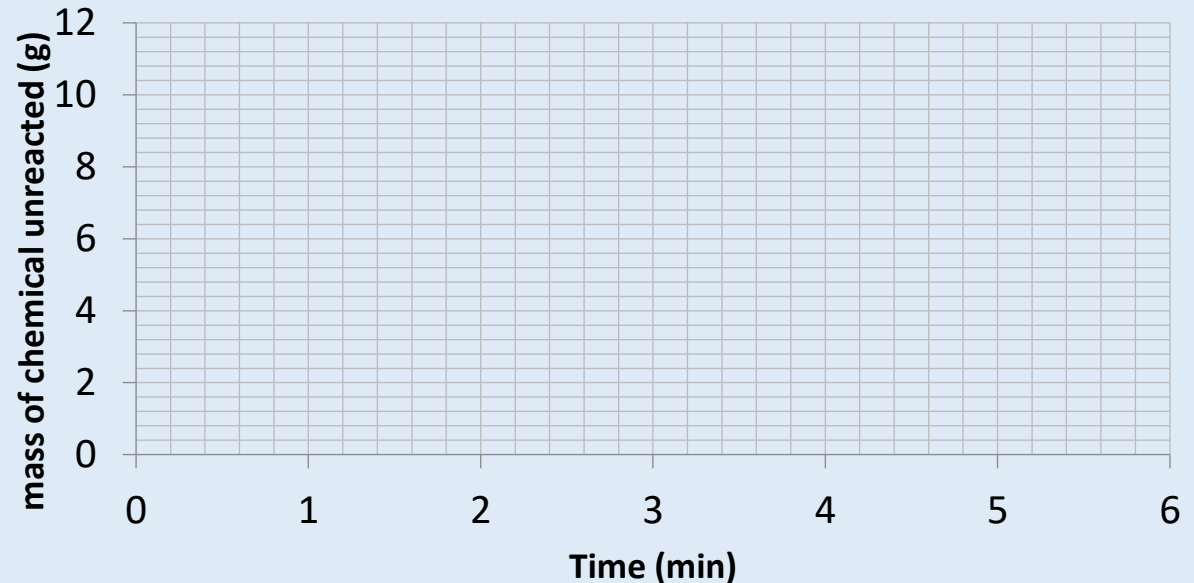
# Line Graphs

- In science, graphs are always used as a method to portray scientific data. By plotting data in a graph it makes it much easier to see any trends within the data to draw conclusions.
- Line Graphs are used when both sets of data are numerical values (e.g. **mass** of unreacted chemical against **time**)

# Line Graphs

1. If the paper isn't pre set, draw the axis on the paper. Leave space for labels and scales.
2. The first set of data on the table will generally go on the x (horizontal) axis with the second set (measured data) on the y (vertical) axis. Add the labels to each axis.
3. The bottom left corner of a graph is always 0
4. Find the largest value within your data. You need your scale to go from 0 that value or higher, jumping in equal intervals. The graph should use at least half your graph paper. A common error is plotting the numbers from the table on the axis. This should not be done if the numbers don't follow a 'times table'

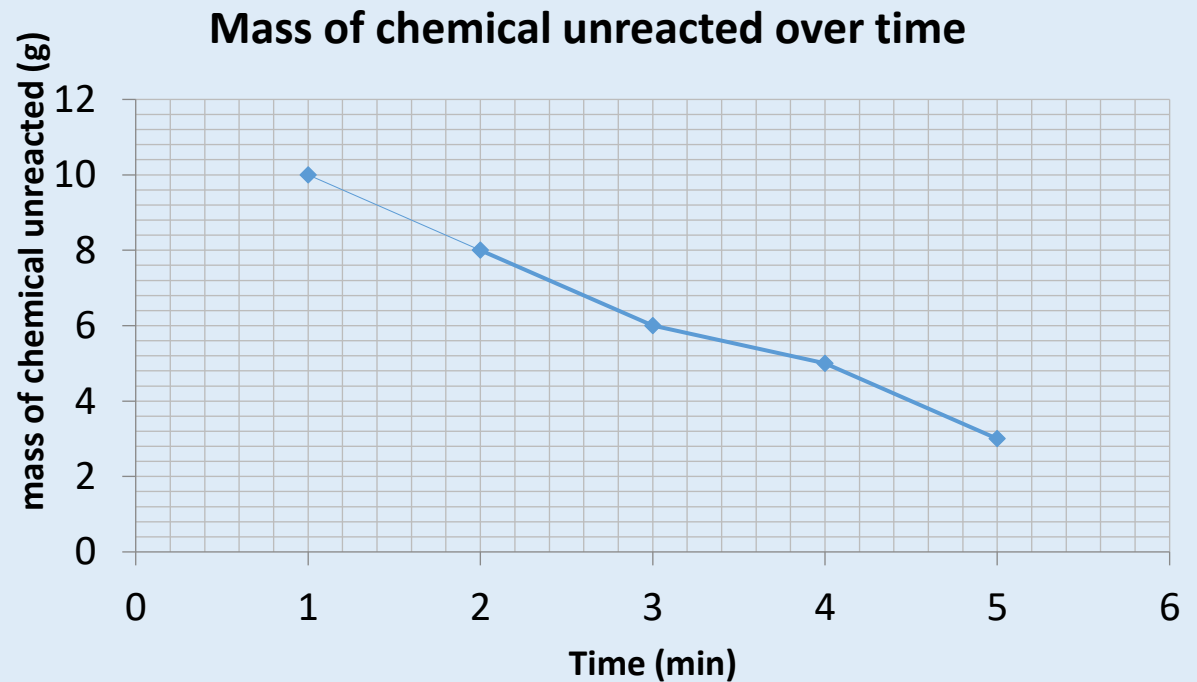
Time (min)	Mass of chemical unreacted (g)
1	10
2	8
3	6
4	5
5	3



# Line Graphs

- Plot each point on the graph and draw a line between each one. You do not need to connect the line to (0,0) unless there is specifically a point there.
- Add a title that describes the graph

Time (min)	Mass of chemical unreacted (g)
1	10
2	8
3	6
4	5
5	3



# Line Graphs: Marking

- Line Graphs are always marked based on the 4 success criteria's:
  1. A title describing what the graph is portraying
  2. A number scale on your X and Y axis that starts at 0 and moves up in equal intervals.
  3. Labels for each axis taken directly from the data table
  4. Point plotted correctly and joined together with a straight line.