Scattergraphs

| Scattergraphs           |  |  |
|-------------------------|--|--|
| Correlation             | Correlation between two sets of data means   | There is correlation between temperature and the   |
|                         | they are <b>connected</b> in some way.   | number of ice creams sold.   |
| Causality               | When one variable <b>influences</b> another variable.  | The more hours you work at a particular job (paid hourly), the higher your income from that job will be. |
| Positive<br>Correlation | As one value <b>increases</b> the other value <b>increases</b> .   | Positive Correlation   |
| Negative<br>Correlation | As one value increases the other value decreases.  | Negative Correlation   |
| No<br>Correlation       | There is <b>no linear relationship</b> between the two.  | X X X X X X X X X X X X X X X X X X X  |
| Strong<br>Correlation   | When two sets of data are closely linked.  | Strong<br>Positive<br>Correlation  |
| Weak<br>Correlation     | When two sets of data have correlation, but are <b>not closely linked</b> .  | Weak Positive Correlation  |
| Scatter<br>Graph        | A graph in which values of <b>two variables</b> are plotted along two axes to <b>compare</b> them and see if there is any <b>connection</b> between them.        | Statement or quality characteristic data   |
| Line of Best<br>Fit     | A straight line that best represents the data on a scatter graph.  | x x x x x x x x x x x x x x x x x x x  |
| Outlier                 | A value that 'lies outside' most of the other values in a set of data.  An outlier is <b>much smaller or much larger</b> than the other values in a set of data. | Outlier  Outlier  0 20 40 60 80 100  |

