Graphs, tables and charts, (foundation and higher)

Grouped frequency table – a table with data in classes

Inequality – eg 30 < y ≤ 31 (y is greater than 30 but less than or equal to 31)

Discrete data – can only take particular values, usually whole numbers
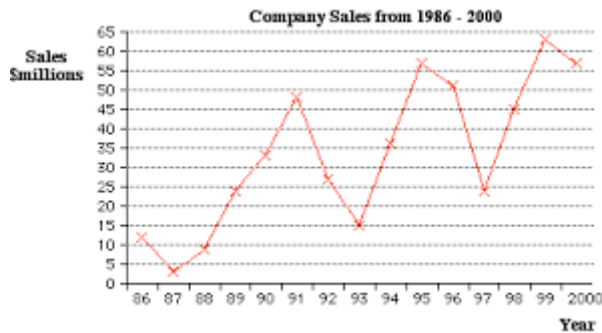
Continuous data – data that is measured and can take any value, eg length and time

Correlation – a measure of relationship between two sets of data

Interpolation – Using a line of best fit to predict data values within the range

Extrapolation – Using a line of best fit to predict data values outside of the range

Time series

Company Sales from 1986 - 2000

Two way tables

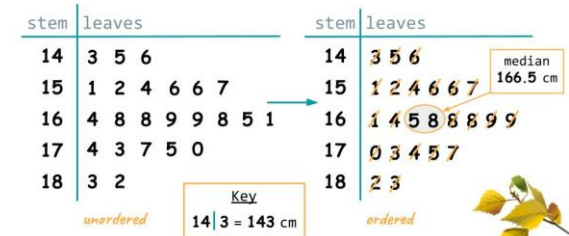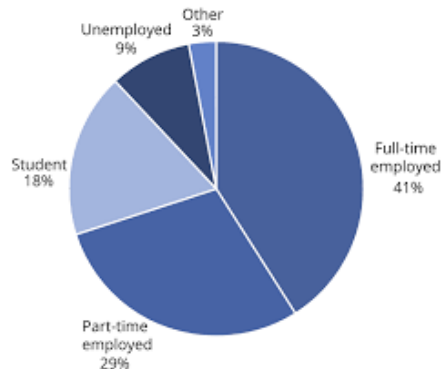|	Like Skateboards	Do Not Like Skateboards	Totals
Like Snowmobiles	80	25	105
Do not like Snowmobiles	45	10	55
Totals	125	35	160

MathBits.com

STEM AND LEAF DIAGRAMS

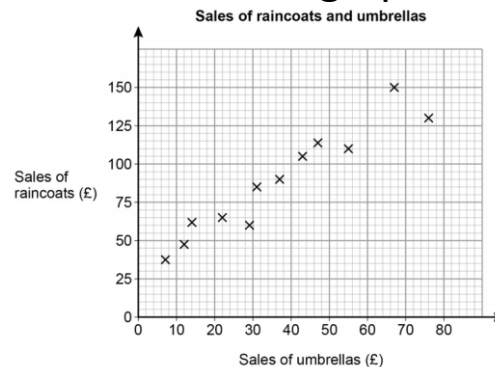Twenty four students recorded their heights to the nearest centimetre:

174 151 143 173 164 152 168 154
168 177 183 169 156 169 156 145
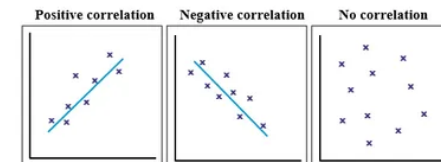168 165 175 182 146 161 170 157

stem	leaves
14	3 5 6
15	1 2 4 6 6 7
16	4 8 8 9 9 8 5 1
17	4 3 7 5 0
18	3 2

unordered

stem	leaves
14	3 5 6
15	1 2 4 6 6 7
16	1 4 5 8 8 8 9 9
17	0 3 4 5 7
18	2 3

median 166.5 cm

ordered

Key

14 | 3 = **143** cm

Pie Charts

Other 3%
Unemployed 9%
Student 18%
Full-time employed 41%
Part-time employed 29%

Scatter graphs

Sales of raincoats and umbrellas

Sales of raincoats (£)

Sales of umbrellas (£)

Correlation

Positive correlation   Negative correlation   No correlation

The points lie close to a straight line, which has a positive gradient.

The points lie close to a straight line, which has a negative gradient.

There is no pattern to the points.

This shows that as one variable **increases** the other **increases**.

This shows that as one variable **increases**, the other **decreases**.

This shows that there is **no connection** between the two variables.