Boxplot — Construction

The 'median' splits the data set into **two equal groups.**

Median
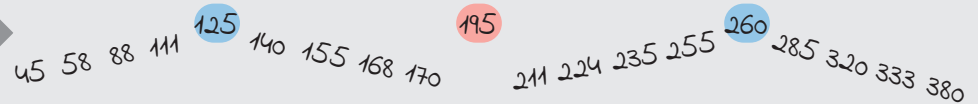
45 58 88 111 125 140 155 168 170 **195** 211 224 235 255 260 285 320 333 380
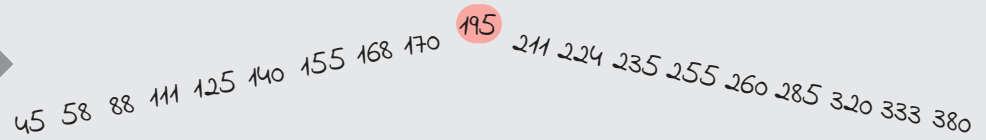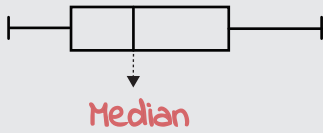
The 'lower quartile' and 'upper quartile' are the median values of lower half and higher half respectively.

Lower Quartile   Upper Quartile

45 58 88 111 **125** 140 155 168 170 **195** 211 224 235 255 **260** 285 320 333 380

Find the 'minimum' and 'maximum'.

Minimum   Maximum

45 58 88 111 **125** 140 155 168 170 **195** 211 224 235 255 **260** 285 320 333 **380**
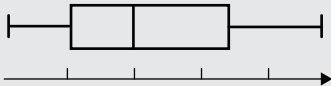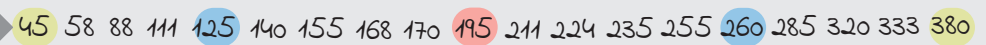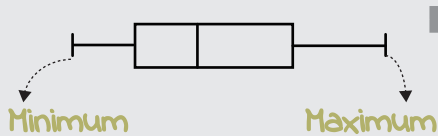
The last step, put these 5 values on the axis, draw a 'box' between 'lower quartile' and 'upper quartile' and link two 'whiskers' to 'minimum' and 'maximum'.

0   50   100   150   200   250   300   350   400