

**Box Plot**  
a method of visually displaying a distribution of data values by using the median, quartiles, and extremes of the data set. The box shows the middle 50% of the data.  
  
**quartiles**  
when the data is divided into four groups having equal frequencies  
  
**Lower quartile LQ**  
the median of the lower half of a set of numbers  
  
**Upper quartile**  
the median of the upper half of a set of numbers

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**Interquartile range IQR**  
the range of the middle half of a set of numbers  
  
**minimum value**  
the lowest value in a set of data  
  
**maximum value**  
the greatest value in a set of data  
  
**5 number summary**  
minimum value  
lower quartile  
median  
upper quartile  
maximum value

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**How to make a box and whisker plot**  
- find median of data  
-plot median (draw a line)  
-find lower quartile (median of lower half)  
-plot lower quartile (draw a line)  
- find upper quartile (median of upper half)  
-plot upper quartile (draw a line)  
-connect lines to form a box  
-plot minimum (use a dot)  
-plot maximum (use a dot)  
-draw whiskers

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9, 8, 10, 15, 7, 20, 13, 23, 17, 22, 8  
  
median=  
LQ=  
UQ=  
minimum=  
maximum=

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