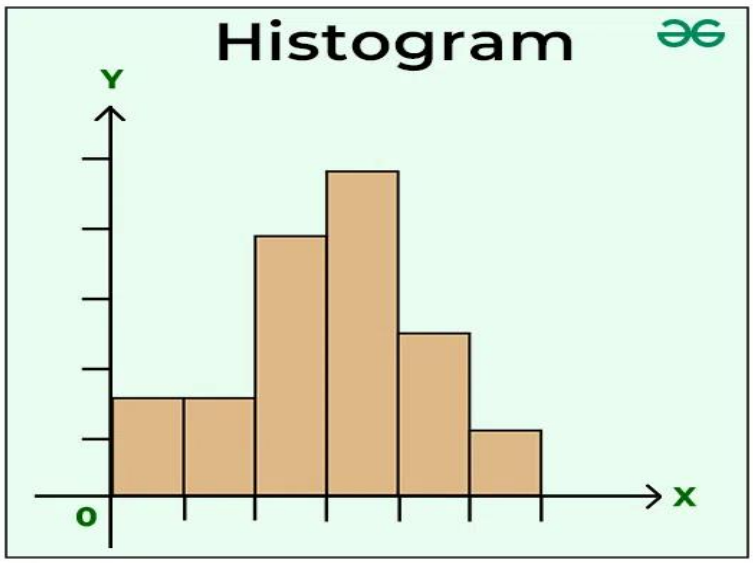
Summary

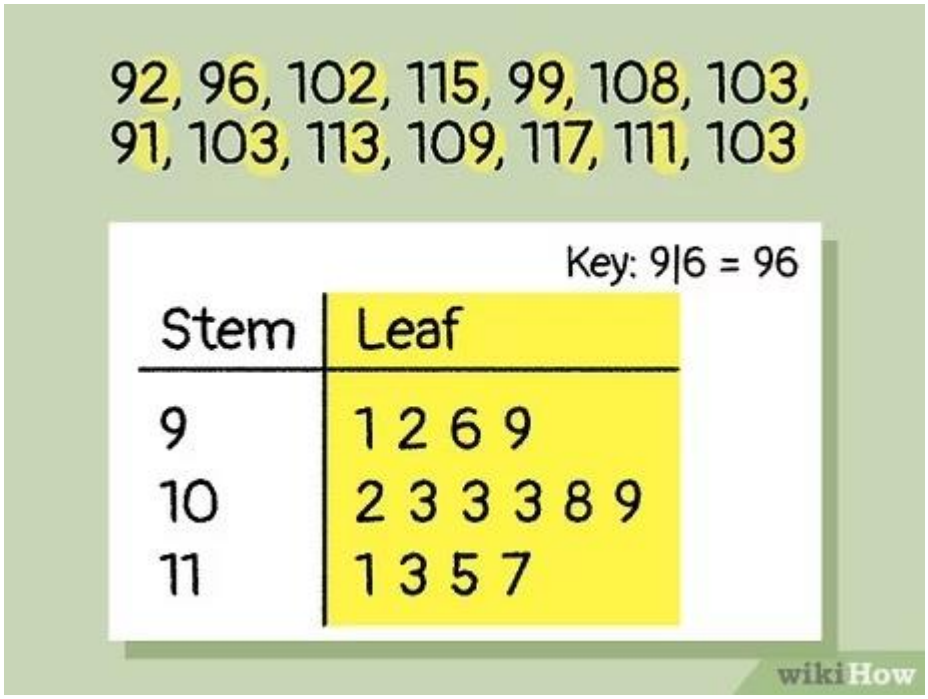
Histograms:

Histograms are graphs made up of bars where each bar represents the frequency of the occurrence of a range of values.



Stem And Leaf Plot:

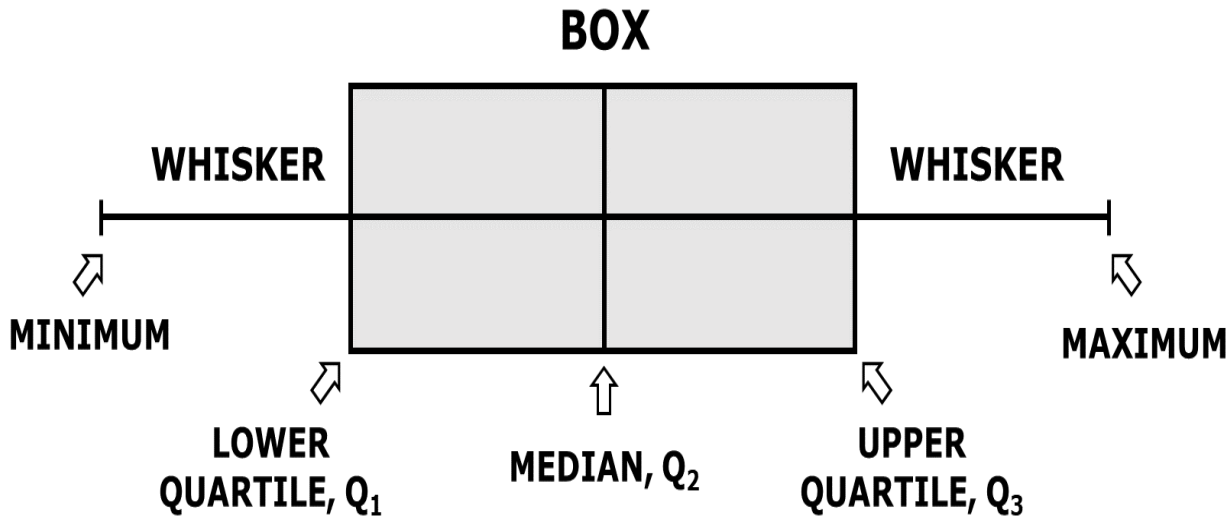
A Stem and Leaf Plot is a special table where each data value is split into a stem (the first digit or digits) and a leaf (usually the last digit).



Box And Whiskers Plot:

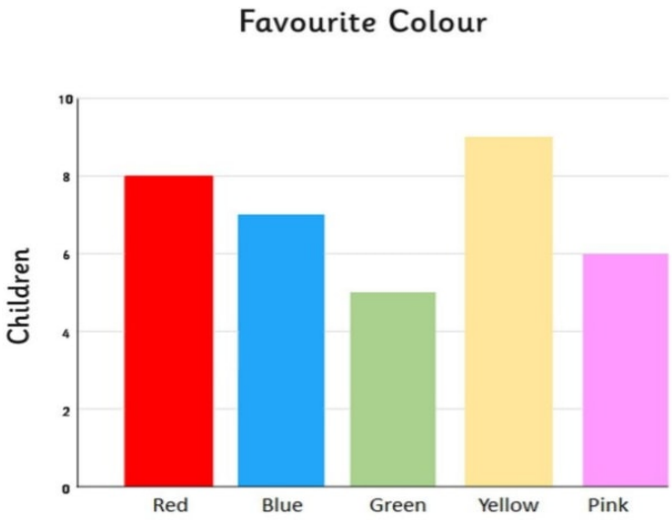
A box and whisker plot is effective in showing where the range in which most of the data fall, the interquartile range, and The maximum and minimum.

Figure 4.5.2.1 Building a box and whisker plot



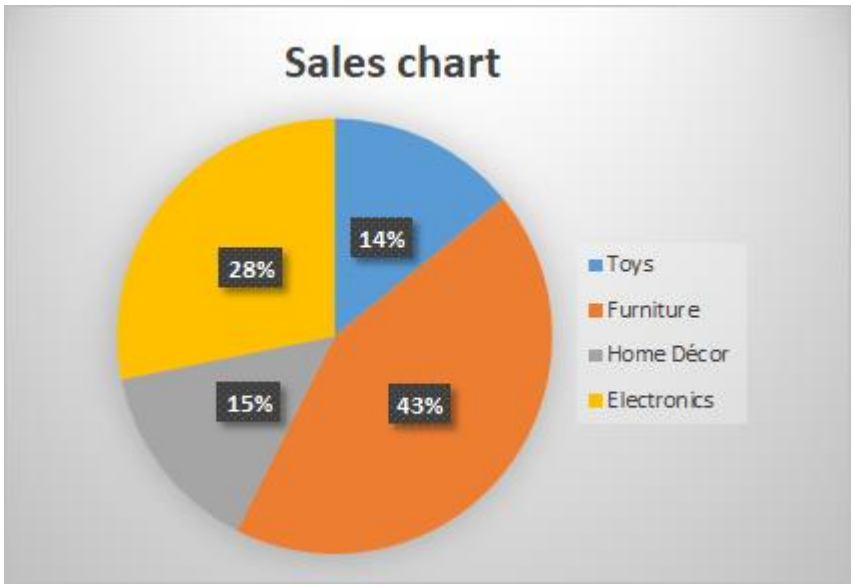
Bar Graphs:

In bar graphs, bars are used to represent the occurrence/frequency of catgorical/qualitative data.



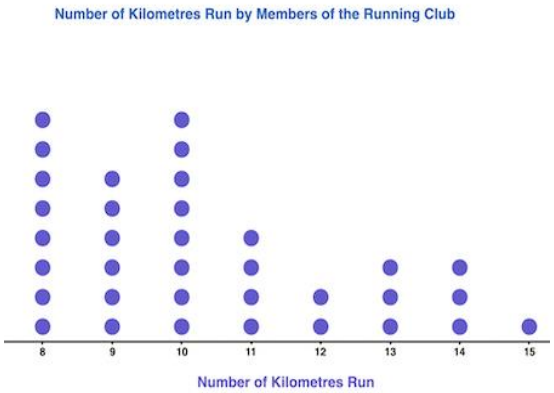
Pie Chart:

Pie charts are used to divide the data and show each data point(s) as part of a whole.



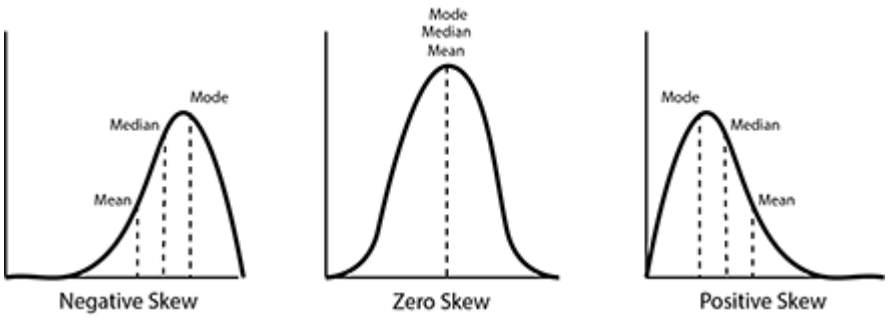
Dot Plot:

Dot Plots use a dot to represent an instance of the value in the x-axis. Dot plots are useful since they imitate the frequency distribution of data.



Symmetry and Skewness:

A graph is said to be symmetrical if the right side of the mean equals the left side of the mean and the median equals the mean. A graph is left skewed if most of the data falls to the left side of the mean and the median is greater than the mean. A graph is right skewed if most of the data fall to the right side of the mean and the median is less than the mean.



Heat map:

A heatmap (or heat map) is a graphical representation of data where values are depicted by color. It is used because of the clearness it offers in reading data and getting a general idea of how the data is distributed.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Average Monthly Temperatures at Central Park, New York													
2		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
3	2009	27.9	36.7	42.4	54.5	62.5	67.5	72.7	75.7	66.3	55.0	51.2	35.9	
4	2010	32.5	33.1	48.2	57.9	65.3	74.7	81.3	77.4	71.1	58.1	47.9	32.8	
5	2011	29.7	36.0	42.3	54.3	64.5	72.3	80.2	75.3	70.0	57.1	51.9	43.3	
6	2012	37.3	40.9	50.9	54.8	65.1	71.0	78.8	76.7	68.8	58.0	43.9	41.5	
7	2013	35.1	33.9	40.1	53.0	62.8	72.7	79.8	74.6	67.9	60.2	45.3	38.5	
8	2014	28.6	31.6	37.7	52.3	64.0	72.5	76.1	74.5	69.7	59.6	45.3	40.5	
9	2015	29.9	23.9	38.1	54.3	68.5	71.2	78.8	79.0	74.5	58.0	52.8	50.8	
10	2016	34.5	37.7	48.9	53.3	62.8	72.3	78.7	79.2	71.8	58.8	49.8	38.3	
11	2017	38.0	41.6	39.2	57.2	61.1	72.0	76.8	74.0	70.5	64.1	46.6	33.4	
12														

Violin Plot:

Violin Plots are used when you want to observe the distribution of numeric data, and are especially useful when you want to make a comparison of distributions between multiple groups.