

## Unit 7: Statistics (Measurement + Data)

- measure of center - a single number used to describe a set of numeric data. It describes a typical value from the data set.
- mean - average found by finding the sum of the data values divided by the number of data values in the set.
- median - represents the middle value of an ordered data set.
- mode - most frequent occurring number in the data set.
- measure of variability - a single number used to describe the spread of a data set.
- mean absolute deviation (MAD) - the mean distance between each data value and the mean of the data set.
  - step 1) find the mean
  - step 2) find the difference of each data value and the mean
  - step 3) find the mean of the differences in step 2

- box plot - a display that shows how the values in a data set are distributed (spread out).
- lower quartile - the median of the lower half of the data.
- upper quartile - the median of the upper half of the data.
- interquartile range (IQR) - the difference of the upper quartile and the lower quartile (the box!).
- range - the difference of the greatest value and least value in the data set.
- statistical question - a question that has many, or variable, answers.
- dot plot - a visual display in which each piece of data is represented by a dot above a number line. Shows the frequency of each data value.
- outlier - data values which are either much greater or much less than the other data values.
- histogram - a type of bar graph whose bars represent the frequencies of numeric data within intervals.