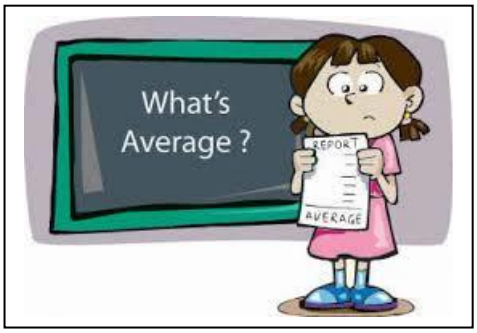

MATHSWATCH CLIP – D3, D4, D5, D7, D9

Data Analysis

We expect pupils to:

- Analyse ungrouped data using a tally table and frequency column or an ordered list
- Calculate range of a data set. In Maths this is taught as the difference between the highest and lowest values of the data set.
  (Range is expressed differently in biology)
- Calculate the mean (average) of a set of data.

- Use a stem and leaf diagram
- Calculate the mean (average)
- Median (central value of an ordered list)
- Mode (most common value) of a data set
- Obtain these values from an ungrouped frequency table.

Correlation in scatter graphs is described in qualitative terms.
E.g.
"The warmer the weather, the less you spend on heating" is negative correlation.
"The more people in your family, the more you spend on food" is positive correlation.

Probability is always expressed as a fraction.

P (event) = number of favourable outcomes
total number of possible outcomes

WORKED EXAMPLE
The results of a survey of the number of pets pupils owned were
3,3,4,4,4,5,6,6,7,8

$$\text{Mean} = \frac{\text{Sum of Scores}}{\text{No. of Scores}} = \frac{3+3+4+4+4+5+6+6+7+8}{10} = 50 \div 10 = 5$$

Median = the middle = (4 + 5) ÷ 2 = 4.5
Mode = most common = 4
Range = highest – lowest = 8 – 3 = 5