

HANDLING DATA

Pupils should be taught to:

Calculate statistics from data, using ICT as appropriate

As outcomes, Year 7 pupils should, for example:

Use, read and write, spelling correctly:
statistic, interval...
range, mean, median, mode, modal class/group, average...

Know that:

- The mode is the only statistic appropriate for data based on non-numeric categories, e.g. the most common way of travelling to school.
- The mean is often referred to as 'the average'.

Find the mode of a small set of discrete data.

Know that the **mode** of a set of numbers is the number that occurs most often in the set. For example:

- For 1, 2, 3, 3, 4, 6, 9, the mode is 3.
For 3, 4, 4, 4, 7, 7, 8, the mode is 4.
For 2, 2, 3, 5, 6, 9, 9, there are two modes, 2 and 9.

In a grouped frequency distribution, the group that contains the most members is called the **modal class** or **modal group**.

Calculate the mean for a small set of discrete data, using a **calculator** for a larger number of items.

The **mean** of a set of numbers is the sum of all the numbers divided by the number of numbers in the set. For example:

- The mean of 2, 6, 8, 9 and 12 is:

$$\frac{2 + 6 + 8 + 9 + 12}{5} = \frac{37}{5} = 7.4$$

- For this data set for 100 words in a newspaper passage:

No. of letters:	1	2	3	4	5	6	7	8	9	10	11	12	13
No. of words:	5	15	31	12	7	6	14	5	3	0	2	0	0
Total letters:	5	30	93	48	35	36	98	40	27	0	22	0	0

the mean number of letters in a word is:

$$\frac{5 + 30 + 93 + 48 + 35 + 36 + 98 + 40 + 27 + 22}{100} = \frac{434}{100} = 4.34$$