

I can find the range, mode, median and mean using a calculator where appropriate.

Example	The marks of 10 children in a test.	71% 54% 83% 62% 38% 90% 75% 77% 43% 62%
THE RANGE	The difference between the highest and lowest values.	Highest – Lowest = 90 – 38 The range is 52%.
THE MODE	The most common value.	The mode is 62%. (twice)
THE MEDIAN	The middle value when the numbers are in size order.	The median is 66.5%. (halfway between 62% and 71%)
THE MEAN	The total divided by the number of items in the set.	$655 \div 10$ The mean is 65.5%.

A

Use a calculator if needed. For each of the following sets of data find:

- the range
- the mode
- the median
- the mean.

1 The numbers of goals scored by a school football team in their 12 matches.

1 3 0 3 1 2
4 1 2 1 0 3

2 The weights in kilograms of the school netball team.

37 31 39 28
41 37 32

3 The weight in kilograms of fish eaten daily by a dolphin.

12.3 16.2 10.8
12.3 13.4

B

Class 6 investigated the forces needed to drag a box across different surfaces. This table shows one group's results.

Test Number	Force needed on:	
	Carpet	Tiles
Test 1	5.6 N	1.4 N
Test 2	7.8 N	1.7 N
Test 3	4.7 N	1.5 N
Test 4	4.8 N	3.7 N
Test 5	5.1 N	1.2 N

- Find the median and the mean for both sets of data.
- Explain why the average or typical value for both sets of data is better shown by the median than the mean.
- Explain why the children tested each material more than once.

C

1 A teacher timed how long seven children took to complete a test. The median time was 11 minutes and the range of times was 6 minutes. Write *Possible* or *Impossible* for each statement.

- The quickest time was 6 minutes.
- The slowest time was 18 minutes.
- The mean time was 8 minutes.
- Three children took 12 minutes.

2 Thirteen children took a test. Their marks out of 100 were as follows.
64 47 56 52 48 63 72
59 68 35 70
The mean mark was 58.
The range was 40.
What are the two missing marks?