GCSE MATHS · AVERAGES AND SPREAD

Blurt it

Step 1

Name _____ **Date** _____

1. Cover your notes and put your phone face down.
2. Set a timer for 5 minutes.
3. Write down everything you remember about averages and spread: methods, key words, examples, and mistakes to avoid. Diagrams count too.

Stuck? Start with one of these: mean · median · outlier

When the timer ends, turn over and check what you remembered.

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Check it, fix it, space it

Steps 2, 3 and 4

Check it

Tick each idea you wrote down, even in your own words.

- [ ] Mean: add up all the values, then divide by how many values there are
- [ ] Median: put the data in order, then take the value in the middle position
- [ ] Mode: the most common value. Range: largest value minus smallest value
- [ ] Frequency table mean: total of (value × frequency) ÷ total frequency, not the number of rows
- [ ] Median from a frequency table: find the middle position using the total frequency
- [ ] Grouped data: the modal class is the class with the highest frequency
- [ ] Do not confuse the modal class with the class that contains the median
- [ ] Estimate the mean of grouped data using the midpoint of each class
- [ ] Compare two sets of data using an average and the range, and explain it in context
- [ ] An outlier pulls the mean a lot but barely changes the median

Higher only

- [ ] Cumulative frequency: plot running totals at the upper end of each class
- [ ] Estimate the median and quartiles from a cumulative frequency graph
- [ ] Read across from the cumulative frequency axis, then down to the value axis
- [ ] Interquartile range = upper quartile − lower quartile
- [ ] Box plot: minimum, lower quartile, median, upper quartile, maximum
- [ ] Compare spread with the interquartile range: unlike the range, extreme values do not affect it

Key words to use: mean · median · mode · range · interquartile range · grouped data · modal class cumulative frequency · box plot · outlier

I remembered _____ out of 10. **Higher only: _____ out of 6.**

Fix it

Pick 3 ideas you missed. Look them up, then write each one correctly.

1

2

3

Space it

Blurt again on a fresh sheet. Gaps help you remember for longer.

Tomorrow

Date _____
Score _____ / 10
Higher only _____ / 6

In 3 days

Date _____
Score _____ / 10
Higher only _____ / 6

In a week

Date _____
Score _____ / 10
Higher only _____ / 6

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