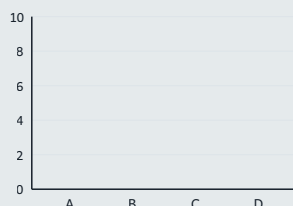


Comparing data sets and drawing inferences

MODULE 9 · DATA AND CHANCE REVIEW

Compare two data sets by their **averages** and their **spread**, then draw careful conclusions (inferences).

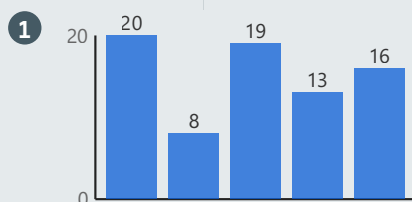


→ A higher mean suggests generally larger values — but check the spread.

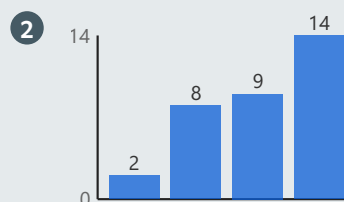
HOW TO ANSWER TODAY

- **Median (middle).** Put the numbers in ORDER. The median is the middle one. If two middles, take their mean.
1, 3, 5, 7, 9 → median 5 · 2, 4, 6, 8 → middles 4 and 6 → median 5
- **Range (spread).** Range = BIGGEST minus SMALLEST.
5, 12, 8, 3, 15 → 15 - 3 = 12
- **Mean (average).** Add ALL the numbers. Divide by HOW MANY there are.
Mean of 2, 5, 6, 9 → $(2+5+6+9) \div 4 = 22 \div 4 = 5.5$

WARM-UP



At home time, Oisín tallies the cars waiting at the school gate by colour. He counts **20** black, **8** red, **19** silver, **13** blue and **16** white cars. What is the median of these five counts?



In a 5th class science investigation, Oisín times how long water takes to trickle through four soil samples. The times in seconds are **2**, **8**, **9** and **14**. What is the range of the times?