

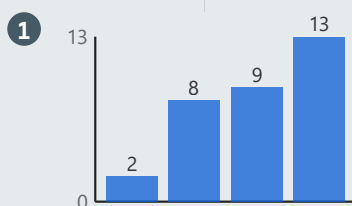
Maths journal review and self-assessment

MODULE 9 · MATHEMATICAL MODELING AND END-OF-YEAR REVIEW REVIEW

HOW TO ANSWER TODAY

- **Mean (average).** Add ALL the numbers. Divide by HOW MANY there are.
Mean of 2, 5, 6, 9 → $(2+5+6+9) \div 4 = 22 \div 4 = 5.5$
- **Y-axis scale.** Pick a step that makes the tallest bar fit but isn't so small the chart is huge.
Tallest = 75 → use steps of 10 (about 8 grid lines), not 1 (75 lines)
- **Read a bar chart.** Read the top of each bar. Check the y-axis scale to see what each grid line is worth.
Each grid line = 5, bar reaches the 4th line → value is 20

WARM-UP



Saoirse runs a survey in 5th class on how many pupils walk to school each day. The numbers walking on Monday, Tuesday, Wednesday and Thursday are 2, 8, 9 and 13. What is the mean number of pupils walking to school per day?

- 2 5th class are drawing a bar chart of the rainy days logged on the school weather chart, and the tallest bar will reach 7 days. They need to choose a sensible step for the y-axis from 1, 5 or 10 so the chart shows about 10 to 15 grid lines from 0 up to the top. Which step should they pick?

You are drawing a bar chart and the largest bar will be 7. Choose a sensible y-axis step from 1, 5 or 10 so the chart shows about 10 to 15 grid lines from 0 to the top.

PRACTICE

- 1 Sean is drawing a Cumann na mBunscol pitch to scale on squared paper. The real pitch uses a ratio of 5 metres across to 2 metres down, and on his drawing 20 squares across must match the same shape. How many squares down should he draw to make the ratio 5:2 equal to 20:?

Fill in the missing number to make equivalent ratios: $5:2 = 20:?$

- 2 Saoirse's class made a bar chart of their favourite fruits for a healthy-eating survey. Apple got 23 votes, Pear got 32 votes, Orange got 11 votes and Banana got 34 votes. By how many votes does the Orange bar differ from the Pear bar?

A bar chart shows fruit preferences in a class. Apple: 23, Pear: 32, Orange: 11, Banana: 34. By how much does the Orange bar differ from the Pear bar?

CHALLENGE

- 1 5th class are lining up at the door before going to the yard. 18 of the 24 pupils have remembered their hi-vis vests for the walk. Write the fraction $18/24$ in its lowest terms.

Simplify $18/24$ to lowest terms.

- 2 For an art lesson, Tadhg's 5th class weighs the autumn leaves they gathered in the school yard. The oak leaves weigh 19.431 g and the sycamore leaves weigh 58.70 g. What is the total weight of the leaves?

$19.431 + 58.7 = ?$