

Bar charts: choosing a scale

MODULE 7 · DATA, CHANCE AND THE CO-ORDINATE PLANE DATA & CHANCE

HOW TO ANSWER TODAY

- **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)

★ STRETCH PROBLEMS

- 1 Cian's 5th class did a survey of how all 228 pupils in the school travel to school each day. He is drawing a bar chart and the tallest bar will reach 228. From the steps 1, 5 or 10, which one should he choose for the y-axis so the chart shows about 20 to 25 grid lines from 0 up to the top?
- 2 5th class are drawing a bar chart of the rainfall logged on the school weather chart over a fortnight. The wettest day measured 117 mm and they need to 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. Which step should they pick?
- 3 Tadhg is drawing a bar chart of the hurling scores from the Cumann na mBunscol blitz. The highest score on any bar will be 54 points. He needs to pick a sensible step for the y-axis from 1, 5 or 10 so the chart has about 10 to 15 grid lines from 0 up to the top. Which step should Tadhg choose?
- 4 Aoife is drawing a bar chart in her maths copy to show the reading-test scores for 5th class across the term. The highest score on any bar will be 34. She wants the chart to have about 5 to 10 grid lines from 0 up to the top. Should she use a y-axis step of 1, 5 or 10?
- 5 5th class are drawing a bar chart of the rainfall logged on the school weather chart over a fortnight. The wettest day measured 37 mm. They need to choose a sensible step for the y-axis from 1, 5 or 10 so the chart shows about 5 to 10 grid lines from 0 up to the top. Which step should they pick?

