Bar charts — choosing a scale

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

HOW TO ANSWER TODAY

- **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
- **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. 5th class ran a fruit survey across the whole school for Healthy Eating Week. Their bar chart shows Apple: **20**, Pear: **30**, Orange: **37**, Banana: **11**, Plum: **40**. How many pupils took part in the survey in total?

2. Cian is drawing a bar chart in his maths copy to show the daily-question results across a week in 5th class. The tallest bar will reach **117** correct answers. He needs 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** to the top. Which step should Cian choose?

   > You are drawing a bar chart and the largest bar will be 117. 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.

3. 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?

   > You are drawing a bar chart and the largest bar will be 117. 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.

4. 5th class made a bar chart of points scored by each team at the Cumann na mBunscol hurling blitz. The Shamrocks scored **17**, the Harps scored **30**, the Gaels scored **18**, the Rovers scored **19** and the Celts scored **32**. How many points were scored in total across the blitz?

   > A bar chart shows fruit preferences in a class. Apple: 17, Pear: 30, Orange: 18, Banana: 19, Plum: 32. How many pupils took part in total?

5. 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?