

Bar charts – choosing a scale

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

A **bar chart** shows frequencies as bars. Every bar must have the **same width** with **equal gaps** between them. The vertical scale shows how many — choose a sensible step (e.g. 1, 2, 5, 10) so the tallest bar fits.

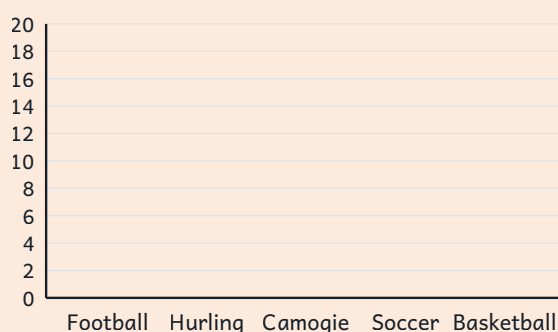
- If the highest frequency is 18, a scale going up in **2s** to 20 fits cleanly.
- If you only have one or two of each, a scale in **1s** is fine.

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)

TRY IT ON THE LINE

The y-axis steps in 2s so the tallest bar fits cleanly. Plot each value.



1. **Football:** 18 — draw the bar.
2. **Hurling:** 12 — draw the bar.
3. **Camogie:** 8 — draw the bar.
4. **Soccer:** 14 — draw the bar.
5. **Basketball:** 4 — draw the bar.
6. Would a step of 5 have worked for this data? Why? _____

PRACTICE

- 1 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?

You are drawing a bar chart and the largest bar will be 54. 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.

- 2 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 **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 37. 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.