

Making a bar chart with a chosen scale

CURRICULUM ALIGNMENT

DAT.DAT.3

pose questions of interest and collect, display and critically analyse data in a range of ways for a range of purposes and communicate the findings.

INTERACTIVES [Bar Chart Builder · challenge, display, explore](#)

WHAT THIS LESSON TEACHES

To make a bar chart, first choose a scale up the side that lets the biggest value still fit on the page. Mark the scale in equal steps, then draw each bar to the right height.

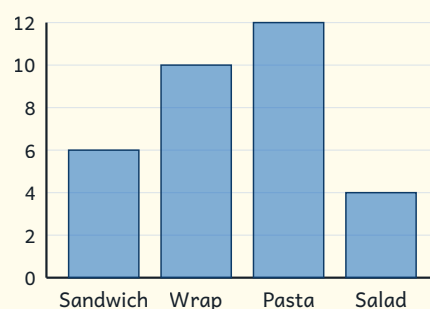
→ The biggest value is 12, so a scale marked in 2s (0, 2, 4, 6, 8, 10, 12) fits it in six steps.

→ A bar reaching the line marked 8 shows a frequency of 8.

MODEL THIS ON THE BOARD

CHOOSING A SCALE FOR LUNCH CHOICES

- 1 The lunch counts are **6, 10, 12** and **4**. The biggest value is **12**.
- 2 A scale in **2s** fits neatly: 0, 2, 4, 6, 8, 10, **12**.
- 3 Mark the side axis in 2s and draw each bar to its height; the bar for 10 reaches the line marked **10**.



DISCUSSION STARTER

REFLECT

How did you choose a scale that fitted your biggest value without wasting space?

ANSWER KEY

Scaffold: visual check on the page

Q1: sandwich 3, pasta 5, wrap 6, salad 2

Spot:

On a scale of 2, each step stands for 2, so the bar for 8 should go up **4** steps (because $4 \times 2 = 8$), not 8 steps.

EXTENSION SHEET · STRETCH ANSWERS

S1: Orange (39)

S2: 108

S3: 26

S4: Pear (37)

S5: step of 10

Investigation: Chart a class favourite — open-ended; scan pupils' working for valid solution paths rather than a single answer.