

SPOTTING A TRICKY SCALE

- 1 Look at the numbers on the vertical axis and check if it starts at zero.
- 2 See the real difference between the two values like 92 and 96.
- 3 Imagine or sketch the same bars with a scale that starts at zero to compare.

 WARM-UP

Draw a fair bar chart of the family quiz scores on the blank axes.



1. Label the two categories Mum and Dad along the bottom
2. Number the vertical scale from 0 to 100 in steps of 10
3. Draw a bar up to 62 for Mum and a bar up to 66 for Dad

 PRACTICE

- 1 Your friend scored **74** points and your cousin scored **78** points in a game. A bar chart starts its scale at **70**. How does this change how big the difference looks?
- 2 Two family teams collected **450** and **480** cans. The graph scale starts at **440**. What trick does this play?
- 3 Your brother has **9** books and your sister has **12** books. If the picture scale starts at **8**, what happens to the heights?
- 4 Family A walked **720** steps and Family B walked **760** steps. A graph starts at **700**. Name the misleading trick.
- 5 Cousins picked **310** and **340** berries. The bar chart axis begins at **300**. How would a fair scale from zero look different?

ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. A bar chart scale that starts above zero makes small differences look bigger. ☐
- b. A graph scaled from 90 for values 92 and 96 is misleading. ☐
- c. A scale with equal spaces for 0, 10, 50 and 100 is fair. ☐
- d. Drawing 480 with a symbol twice as tall as the one for 450 is fair. ☐