

Posing statistical questions and collecting data

MODULE 9 · DATA AND CHANCE

DATA & CHANCE

HOW TO ANSWER TODAY

- **Tally marks.** Tally marks come in gates of 5. Count gates $\times 5$, then add the singles.
3 gates + 2 singles $\rightarrow 3 \times 5 + 2 = 17$
- **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 $\rightarrow$ value is 20

STRETCH PROBLEMS

- 1 Saoirse helps the PE teacher complete a frequency table of laps run by 6th class over the month. The table has 4 rows with counts 4, 20, 8 and 6. What is the total number of responses across all rows?
- 2 Cara's school surveyed pupils about their favourite fruit and drew a bar chart. The chart shows Apple chosen by 35 pupils, Pear by 38, Orange by 14, Banana by 39 and Plum by 37. How many pupils took part in total?
- 3 6th class surveyed pupils on how they spent their pocket money over the half-term. The frequency table has 4 rows with these counts: 22, 17, 15, 8. What is the total number of responses across all rows?
- 4 6th class ran a daily question asking which fruit pupils liked best. The bar chart of results shows apple with 13 votes, pear with 10, orange with 39, banana with 21 and plum with 9. How many pupils took part in total?
- 5 Aoife looks at the bar chart of favourite fruits on the 6th class noticeboard. Apple has 12, Pear has 28, Orange has 34, Banana has 8 and Plum has 26. How many pupils took part in total?

INVESTIGATE

Survey the class

Think of a question worth asking your class where the answers will **vary**. Plan how to collect the data fairly, gather it, and decide the best way to show what you found.
