Collecting data

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

1. Eight people each select one colour. The counts are Red 3, Blue 4, Green 1. Check the total. [1 mark]

$3 + 4 + 1 = 8$.

Answer: 8 responses; it matches.

2. Nine people are asked for one answer each. The recorded category counts total eight. Give one possible reason. [1 mark]

Check the original record rather than guessing a category.

Answer: One response may be missing, or one person may not have answered.

3. Improve this survey instruction: “Pick sports.” [2 marks]

Clear categories and one-choice instructions make responses consistent.

Answer: For example: “Choose one favourite sport from football, cricket or netball.”

4. Record these responses in a frequency table: dog, cat, dog, bird, cat, dog. [2 marks]

Count each of the six responses once.

Answer: Dog 3; cat 2; bird 1.

5. A tally has five groups of five marks and two extra marks. How many responses is that? [1 mark]

$5 \times 5 + 2 = 27$.

Answer: 27.

6. Why is it useful to decide a recording method before asking a survey question? [2 marks]

A prepared list or table supports an accurate record.

Answer: It helps record every response consistently and makes omissions or double counting easier to detect.