

Posing statistical questions and collecting data

WHAT THIS LESSON TEACHES

A statistical question expects a spread of different answers from a group, not one fixed fact.

→ How many minutes do you spend on homework?

→ What is your favourite sport?

MODEL THIS ON THE BOARD

CHECKING IF A QUESTION IS STATISTICAL

- 1 Read the question carefully.
- 2 Ask yourself if answers from the class will vary or stay the same.
- 3 If answers vary across pupils then it is statistical.

ANSWER KEY

c) 5, 4, 3

Q1: Yes (statistical)

Q2: Yes (statistical)

Q3: statistical

Q4: Yes (statistical)

a) Never — It has one fixed answer so it is never statistical.

b) Always — Shoe sizes vary so it always produces a spread of answers.

c) Never — If answers do not vary it is never worth surveying as statistical.

d) Always — Sleep times differ so it always gives varied answers.

EXTENSION SHEET · STRETCH ANSWERS

S1: 116

S2: 41

S3: 48

S4: 138

S5: 106

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