

Name _____

Date _____

Stage 7 End-of-unit test 6

23 questions · 40 marks · calculators are not allowed · allow about 45 minutes

1 What type of data is **eye colour**? [1]

- ☐ categorical
☐ discrete
☐ continuous

2 What type of data is **the number of goals scored**? [1]

- ☐ categorical
☐ discrete
☐ continuous

3 What type of data is **the time taken to run 100 m**? [1]

- ☐ categorical
☐ discrete
☐ continuous

4 How many learners took part altogether? [2]

Pet	Frequency
dog	12
cat	9
fish	5
rabbit	3
none	11
Total	40

5 How many learners have a pet of some kind? [2]

Pet	Frequency
dog	12
cat	9
fish	5
rabbit	3
none	11
Total	40

- 6 Which pet is the most common? Give the word. [1]

Pet	Frequency
dog	12
cat	9
fish	5
rabbit	3
none	11
Total	40

- 7 How many learners are shorter than 160 cm? [2]

Height h (cm)	Frequency
$140 \leq h < 150$	4
$150 \leq h < 160$	11
$160 \leq h < 170$	9
$170 \leq h < 180$	6

- 8 How wide is each class interval, in cm? [1]

Height h (cm)	Frequency
$140 \leq h < 150$	4
$150 \leq h < 160$	11
$160 \leq h < 170$	9
$170 \leq h < 180$	6

- 9 Why must class intervals not overlap? [2]

- ☐ It looks untidy
- ☐ Some values would belong to two groups at once
- ☐ The total would be wrong
- ☐ There is no reason

- 10 Which of these is a good statistical question? [2]

- ☐ What is my shoe size?
- ☐ Which shoe size is most common in Year 7?
- ☐ Are big feet better?
- ☐ How many shoe sizes exist?

- 11 A questionnaire offers 0–5, 5–10, 10–15. What is wrong? [2]

- ☐ Nothing
- ☐ The groups overlap
- ☐ The groups are too wide
- ☐ There are too few groups

- 12 A frequency table has rows 12, 9, 5 and one missing value. The total is 40. What is the missing frequency? [2]
-
- 13 What is a population, in statistics? [1]
- ☐ Everyone in a country
 - ☐ Every member of the group being studied
 - ☐ The people you ask
 - ☐ The largest category
- 14 What happens as the sample size increases? [2]
- ☐ The result gets less reliable
 - ☐ The result generally gets more reliable
 - ☐ Nothing changes
 - ☐ Bias disappears
- 15 Does a larger sample remove bias? [2]
- ☐ Yes
 - ☐ No
- 16 You survey favourite sports at the football club. What is wrong? [2]
- ☐ Nothing
 - ☐ The sample is biased towards football fans
 - ☐ The sample is too large
 - ☐ Sport is continuous data
- 17 What kind of sampling is **choosing every 10th name on the register**? [1]
- ☐ random
 - ☐ systematic
 - ☐ convenience
 - ☐ biased
- 18 A school has 750 learners and takes a sample of 1 in 25. How many learners are sampled? [2]
-
- 19 In a sample of 60 learners, 24 play an instrument. Estimate how many of the 900 learners in the school do. [3]
-
- 20 Of 250 people asked, 40% walk to work. How many people is that? [2]
-
- 21 A sample of 45 is taken from 900 people. What percentage of the population is that? [2]
-
- 22 A TV show asks viewers to phone in. Why might the result mislead? [2]
- ☐ The lines are slow
 - ☐ Only people who feel strongly will call
 - ☐ Too many call
 - ☐ Calls cost money
- 23 A survey is carried out only on a weekday morning. Name the problem in one word. [2]
-

END OF TEST