

Name _____

Date _____

Maths vocabulary — answers

40 tasks in five styles, covering every key word in Unit 1.

A · Unscramble the term — Rearrange the letters to make the term that matches the definition.

1 tada

Information that has been collected.

Example: Heights of 30 learners.

Answer: data

The word is **data** — Information that has been collected.

2 yrfqeeucn

How many times a value or category occurs.

Example: 12 learners have a dog.

Answer: frequency

The word is **frequency** — How many times a value or category occurs.

3 laspme

The part of the population you collect data from.

Example: 40 of the 800.

Answer: sample

The word is **sample** — The part of the population you collect data from.

4 oopupalitn

Every member of the group being studied.

Example: All 800 learners.

Answer: population

The word is **population** — Every member of the group being studied.

5 uecsns

A survey of the whole population.

Example: Asking all 800.

Answer: census

The word is **census** — A survey of the whole population.

6 aibs

When some members are more likely to be chosen than others.

Example: Surveying sport at a football club.

Answer: bias

The word is **bias** — When some members are more likely to be chosen than others.

7 yatll

A key word from this unit.

Example: See the glossary.

Answer: tally

The word is **tally** — A key word from this unit.

8 tidcsere

A key word from this unit.

Example: See the glossary.

Answer: discrete

The word is **discrete** — A key word from this unit.

B · Fill in the gaps — Use a word from the box to complete each sentence.

- 9** Data that is a word or a label is called _____ data.

Word box: □

Answer: categorical

Eye colour is an example.

- 10** Numerical data that you count is called _____ data.

Word box: □

Answer: discrete

The number of pets is an example.

- 11** Numerical data that you measure is called _____ data.

Word box: □

Answer: continuous

Height is an example.

- 12** Every member of the group being studied is the _____.

Word box: □

Answer: population

It might be one year group, not a country.

- 13** The part of the population you actually ask is the _____.

Word box: □

Answer: sample

Its size tells the reader how much to trust the result.

- 14** A survey of the whole population is called a _____.

Word box: □

Answer: census

Most reliable, rarely practical.

- 15** When some members are more likely to be chosen than others, the sample has _____.

Word box: □

Answer: bias

A bigger sample does not fix it.

- 16** How many times a category occurs is its _____.

Word box: □

Answer: frequency

It is the last column of a frequency table.

C · Choose the correct ending — Pick the reason that correctly finishes each sentence.

- 17** Height is continuous data because ...

- ☐ it is always a large number
- ☐ it is measured, so any value in a range is possible
- ☐ it is written in centimetres

Answer: it is measured, so any value in a range is possible

Counting gives discrete data; measuring gives continuous data.

- 18** Class intervals must not overlap because ...

- ☐ it looks untidy
- ☐ a value would then belong to two groups at once
- ☐ the total would be too large

Answer: a value would then belong to two groups at once

150 fits both 140–150 and 150–160, which is why we write $150 \leq h < 160$.

- 19** A larger sample is usually more reliable because ...

- ☐ it takes longer
- ☐ one unusual answer has less effect on the result
- ☐ it removes bias

Answer: one unusual answer has less effect on the result

Note that it does *not* remove bias.

- 20** Surveying sport at a football club is biased because ...

- ☐ football is popular
- ☐ the people who can be chosen already like football
- ☐ the sample is too small

Answer: the people who can be chosen already like football

Bias is about who could possibly be selected.

- 21** A prediction is written before collecting data because ...

- ☐ it saves time
- ☐ it gives you something the data can test
- ☐ it makes the result correct

Answer: it gives you something the data can test

And a prediction the data contradicts is still a real finding.

- 22** “Don't you agree football is best?” is a poor survey question because ...

- ☐ it is too short
- ☐ it leads people towards one answer
- ☐ football is not a sport

Answer: it leads people towards one answer

A fair question is neutral.

D · Match the definition — Type the term that matches each definition.

- 23 Which term means: *Data you collect yourself.*
Answer: primary data
primary data — Measuring your class.
- 24 Which term means: *Data somebody else collected.*
Answer: secondary data
secondary data — Figures from a website.
- 25 Which term means: *Data that is a word or a label.*
Answer: categorical data
categorical data — Eye colour.
- 26 Which term means: *Numerical data you count.*
Answer: discrete data
discrete data — Number of pets.
- 27 Which term means: *Numerical data you measure.*
Answer: continuous data
continuous data — Height in centimetres.
- 28 Which term means: *A chart for counting in fives as data arrives.*
Answer: tally chart
tally chart — □ □ || = 12.
- 29 Which term means: *How many times a value or category occurs.*
Answer: frequency
frequency — 12 learners have a dog.
- 30 Which term means: *A group measurements are sorted into.*
Answer: class interval
class interval — $150 \leq h < 160$.
- 31 Which term means: *Every member of the group being studied.*
Answer: population
population — All 800 learners.
- 32 Which term means: *The part of the population you collect data from.*
Answer: sample
sample — 40 of the 800.
- 33 Which term means: *A survey of the whole population.*
Answer: census
census — Asking all 800.
- 34 Which term means: *When some members are more likely to be chosen than others.*
Answer: bias
bias — Surveying sport at a football club.

E · Reading statistics — What the instruction words are asking for.

- 35** A question says “record your results in a frequency table”. What must your table contain?
- ☐ Only a tally
 - ☐ A category column and a frequency column
 - ☐ A chart
 - ☐ A prediction

Answer: A category column and a frequency column

Usually with a Total row so the count can be checked.

- 36** A question says “comment on the reliability of the result”. What should you write about?
- ☐ How neat the table is
 - ☐ The sample size and how the sample was chosen
 - ☐ How long it took
 - ☐ The colour of the chart

Answer: The sample size and how the sample was chosen

Those two things decide how much a reader can trust the figure.

- 37** What does “estimate” mean in a statistics question?
- ☐ Guess
 - ☐ Work out a value from a sample, knowing it is not exact
 - ☐ Round to the nearest 10
 - ☐ Measure precisely

Answer: Work out a value from a sample, knowing it is not exact

You still show the calculation — an estimate is not a guess.

- 38** A question asks you to “justify” your sampling method. What is wanted?
- ☐ The method only
 - ☐ A reason why that method gives a fair sample
 - ☐ A drawing
 - ☐ The sample size only

Answer: A reason why that method gives a fair sample

Cambridge awards the mark for the reason, not the label.

- 39** What does “representative” mean?
- ☐ Large
 - ☐ Reflecting the population fairly
 - ☐ Chosen by a teacher
 - ☐ Written down

Answer: Reflecting the population fairly

A random sample is usually representative; a convenience sample usually is not.

- 40** In “How does height vary in Year 7?”, which word makes it a statistical question?
- ☐ height
 - ☐ vary
 - ☐ Year
 - ☐ How

Answer: vary

If the answer varies, you need data to describe it.