

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 oarit

A comparison of amounts, part with part.

Example: 3 : 2.

Answer: ratio

The word is **ratio** — A comparison of amounts, part with part.

2 ehsra

One person's amount.

Example: 20 shared 2 : 3 gives 8 and 12.

Answer: share

The word is **share** — One person's amount.

3 orpporoitn

A comparison of a part with the whole.

Example: 2 : 3 means 2/5 and 3/5.

Answer: proportion

The word is **proportion** — A comparison of a part with the whole.

4 tare

How much of one goes with one of the other.

Example: \$4 per pen.

Answer: rate

The word is **rate** — How much of one goes with one of the other.

5 ecsla

A ratio comparing a drawing with reality.

Example: 1 : 50 000 on a map.

Answer: scale

The word is **scale** — A ratio comparing a drawing with reality.

6 ngeiuavelt

The same value written differently.

Example: 2 : 3 = 8 : 12.

Answer: equivalent

The word is **equivalent** — The same value written differently.

7 ynutira

Working through the value of one.

Example: Divide, then multiply.

Answer: unitary

The word is **unitary** — Working through the value of one.

8 enievsr

Going the opposite way.

Example: More workers, less time.

Answer: inverse

The word is **inverse** — Going the opposite way.

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

- 9** A comparison of amounts, part with part, is a _____.

Word box: □

Answer: ratio

3 : 2.

- 10** A ratio with every part divided by their HCF is in its _____.

Word box: □

Answer: simplest form

12 : 18 = 2 : 3.

- 11** Ratios describing the same comparison are _____.

Word box: □

Answer: equivalent

2 : 3 = 8 : 12.

- 12** One person's amount from a division is their _____.

Word box: □

Answer: share

20 shared 2 : 3 gives 8 and 12.

- 13** The sum of the numbers in a ratio gives the _____.

Word box: □

Answer: total parts

2 + 3 = 5.

- 14** When doubling one quantity doubles the other, they are in _____.

Word box: □

Answer: direct proportion

Cost and quantity.

- 15** Finding the value of one and then scaling up is the _____.

Word box: □

Answer: unitary method

Divide, then multiply.

- 16** When doubling one quantity halves the other, they are in ____.

Word box: □

Answer: inverse proportion

Workers and time.

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

- 17** In the ratio 2 : 3 the first share is $\frac{2}{5}$ of the whole because ...

- ☐ 2 is smaller
☐ there are 5 parts altogether and 2 of them are the first share
☐ $3 - 2 = 1$

Answer: there are 5 parts altogether and 2 of them are the first share

A ratio compares part with part; a fraction compares part with whole.

- 18** You must convert to the same units before writing a ratio because ...

- ☐ it looks neater
☐ 40 cm and 1 m are not comparable as they stand
☐ ratios have units

Answer: 40 cm and 1 m are not comparable as they stand

40 : 100 simplifies to 2 : 5.

- 19** You add the ratio numbers first when sharing because ...

- ☐ it is the rule
☐ the total tells you how many equal parts to divide into
☐ adding is easy

Answer: the total tells you how many equal parts to divide into

Then one part is the total divided by that.

- 20** Adding your shares back up is a good check because ...

- ☐ it wastes time
☐ the shares must return the original total
☐ shares are always equal

Answer: the shares must return the original total

If they do not, something went wrong.

- 21** A taxi fare is not directly proportional to distance because ...

- ☐ taxis are expensive
☐ there is a fixed charge, so zero distance still costs something
☐ distance varies

Answer: there is a fixed charge, so zero distance still costs something

The graph does not pass through the origin.

- 22** The unitary method works because ...

- ☐ one is a small number
☐ if quantities are proportional, the value of one is fixed
☐ dividing is easier than multiplying

Answer: if quantities are proportional, the value of one is fixed

That fixed value is the rate.

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

- 23** Which term means: *A comparison of amounts, part with part.*
Answer: ratio
ratio — $3 : 2$.
- 24** Which term means: *Every part divided by their HCF.*
Answer: simplest form
simplest form — $12 : 18 = 2 : 3$.
- 25** Which term means: *The same comparison, different numbers.*
Answer: equivalent ratio
equivalent ratio — $2 : 3 = 8 : 12$.
- 26** Which term means: *One share in a ratio.*
Answer: part
part — $2 : 3$ has 5 parts.
- 27** Which term means: *One person's amount.*
Answer: share
share — 20 shared $2 : 3$ gives 8 and 12.
- 28** Which term means: *The sum of the ratio numbers.*
Answer: total parts
total parts — $2 + 3 = 5$.
- 29** Which term means: *A comparison of a part with the whole.*
Answer: proportion
proportion — $2 : 3$ means $\frac{2}{5}$ and $\frac{3}{5}$.
- 30** Which term means: *When one doubles, so does the other.*
Answer: direct proportion
direct proportion — Cost and quantity.
- 31** Which term means: *Find the value of one, then scale up.*
Answer: unitary method
unitary method — Divide, then multiply.
- 32** Which term means: *How much of one goes with one of the other.*
Answer: rate
rate — \$4 per pen.
- 33** Which term means: *When one doubles, the other halves.*
Answer: inverse proportion
inverse proportion — Workers and time.
- 34** Which term means: *A ratio comparing a drawing with reality.*
Answer: scale
scale — $1 : 50\,000$ on a map.

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

35 A question says “give the ratio in its simplest form”. What must you do?

- ☐ Add the parts
- ☐ Divide every part by their HCF
- ☐ Multiply them
- ☐ Nothing

Answer: Divide every part by their HCF

12 : 18 becomes 2 : 3.

36 A question says “share 20 in the ratio 2 : 3”. What is the answer?

- ☐ 4
- ☐ 8 and 12
- ☐ 5
- ☐ 2 and 3

Answer: 8 and 12

Both shares, in the order of the ratio.

37 A question says “what fraction of the whole”. Which number goes on the bottom?

- ☐ The first part
- ☐ The second part
- ☐ The total parts
- ☐ 100

Answer: The total parts

For 2 : 3, the denominator is 5.

38 A question says “in the ratio boys : girls”. What must you be careful about?

- ☐ The size
- ☐ Writing the numbers in that order
- ☐ The units
- ☐ Nothing

Answer: Writing the numbers in that order

Reversing them gives a different answer.

39 A question says “assuming direct proportion”. What does that allow you to do?

- ☐ Guess
- ☐ Find the value of one and multiply
- ☐ Add the quantities
- ☐ Ignore the units

Answer: Find the value of one and multiply

The unitary method.

40 A scale of 1 : 50 000 means ...

- ☐ The map is 50 000 cm long
- ☐ 1 cm on the map is 50 000 cm on the ground
- ☐ The map is 50 000 times too small to use
- ☐ Nothing

Answer: 1 cm on the map is 50 000 cm on the ground

A scale is a ratio between the drawing and reality.