



EP.T68 Devon-Style Maths and Reasoning Mock

GL ASSESSMENT GL-11PLUS-DEVON-MOCK · Calculators not allowed · about 45 minutes

Total Marks

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Name: _____ Date: ____ / ____ / ____

DEVON-STYLE MATHS AND REASONING MOCK. This pack reproduces the multiple-choice format used by GL Assessment for the Devon (Torquay grammar schools') 11+ selection tests. Time allowed: 45 minutes in total, split into two timed sections - do not turn back to Section 1 once Section 2 has begun.

Section 1: Mathematics - 25 questions, 25 minutes, no calculator allowed, covering number, fractions, decimals, percentages, ratio, simple algebra, geometry, measures, averages and multi-step word problems, moving from straightforward warm-up questions to harder multi-step problems by the end.

Section 2: Verbal Reasoning - 25 questions, 20 minutes, grouped into named question types used in GL Assessment papers (compound words, word connections, closest meaning, opposite meaning, odd one out, hidden words, letter sequences, number sequences, alphabet codes, letter-for-number codes, anagrams and logical deduction), each block introduced by its type in brackets. Every question across both sections is multiple choice with five options, A to E, and is worth 1 mark. Choose the single best answer for each question. There is no negative marking, so attempt every question. Total marks available: 50. Work as quickly and carefully as you can, and check your answers if you finish a section early.

1 SECTION 1: MATHEMATICS (25 minutes, 25 questions, no calculator allowed)

Question 1. Work out $4,258 + 3,647$.

- ☐ A) 7,805
- ☐ B) 7,905
- ☐ C) 7,915
- ☐ D) 8,005
- ☐ E) 6,905

(Total for Question 1 is 1 mark)

2 Question 2. Work out $6,102 - 2,754$.

- ☐ A) 3,248
- ☐ B) 3,348
- ☐ C) 3,448
- ☐ D) 3,358
- ☐ E) 4,348

(Total for Question 2 is 1 mark)

3 Question 3. Work out $9 \times 7 - 3 \times 8$.

- ☐ A) 39
- ☐ B) 29
- ☐ C) 45
- ☐ D) 48
- ☐ E) 15

(Total for Question 3 is 1 mark)

4 Question 4. Round 54,637 to the nearest hundred.

- ☐ A) 54,600
- ☐ B) 54,700
- ☐ C) 54,650
- ☐ D) 54,000
- ☐ E) 55,000

(Total for Question 4 is 1 mark)

5 Question 5. Write 0.65 as a fraction in its simplest form.

- ☐ A) 65/100
- ☐ B) 13/20
- ☐ C) 3/5
- ☐ D) 13/2
- ☐ E) 6/10

(Total for Question 5 is 1 mark)

6 Question 6. Simplify the ratio 54:81.

- ☐ A) 2:3
- ☐ B) 6:9
- ☐ C) 18:27
- ☐ D) 3:2
- ☐ E) 4:5

(Total for Question 6 is 1 mark)

7 Question 7. Find 35% of £260.

- ☐ A) £78
- ☐ B) £85
- ☐ C) £91
- ☐ D) £96
- ☐ E) £104

(Total for Question 7 is 1 mark)

8 Question 8. A field near Dartmoor measures 14 m by 9 m. Work out its perimeter.

- ☐ A) 23 m
- ☐ B) 46 m
- ☐ C) 126 m
- ☐ D) 52 m
- ☐ E) 37 m

(Total for Question 8 is 1 mark)

9 Question 9. Solve for x: $6x - 7 = 35$.

- ☐ A) 5
- ☐ B) 6
- ☐ C) 7
- ☐ D) 8
- ☐ E) 9

(Total for Question 9 is 1 mark)

10 Question 10. A ferry leaves Torquay at 14:40 and the crossing takes 85 minutes. What time does it arrive?

- ☐ A) 15:55
- ☐ B) 16:05
- ☐ C) 16:15
- ☐ D) 16:25
- ☐ E) 15:45

(Total for Question 10 is 1 mark)

11 Question 11. What is the lowest common multiple of 6 and 14?

- ☐ A) 20
- ☐ B) 2
- ☐ C) 84
- ☐ D) 42
- ☐ E) 28

(Total for Question 11 is 1 mark)

12 Question 12. A recipe uses 150 g of butter to make 6 scones. How much butter is needed for 10 scones?

- ☐ A) 200 g
- ☐ B) 225 g
- ☐ C) 250 g
- ☐ D) 275 g
- ☐ E) 300 g

(Total for Question 12 is 1 mark)

13 Question 13. Work out $3\frac{5}{6} - 1\frac{2}{3}$.

- ☐ A) $2\frac{1}{6}$
- ☐ B) $1\frac{1}{6}$
- ☐ C) $2\frac{5}{6}$
- ☐ D) $1\frac{5}{6}$
- ☐ E) $5\frac{3}{6}$

(Total for Question 13 is 1 mark)

14 Question 14. The mean of six numbers is 15. Five of the numbers are 9, 14, 17, 11 and 19. What is the sixth number?

- ☐ A) 18
- ☐ B) 19
- ☐ C) 20
- ☐ D) 21
- ☐ E) 22

(Total for Question 14 is 1 mark)

15 Question 15. A coat priced at £120 is reduced by 25% in a sale. What is the sale price?

- ☐ A) £30
- ☐ B) £80
- ☐ C) £90
- ☐ D) £95
- ☐ E) £100

(Total for Question 15 is 1 mark)

16 Question 16. What is the size of each interior angle of a regular decagon (10 sides)?

- ☐ A) 140 degrees
- ☐ B) 144 degrees
- ☐ C) 150 degrees
- ☐ D) 135 degrees
- ☐ E) 160 degrees

(Total for Question 16 is 1 mark)

17 Question 17. Convert 2,750 grams to kilograms.

- ☐ A) 0.275 kg
- ☐ B) 2.75 kg
- ☐ C) 27.5 kg
- ☐ D) 275 kg
- ☐ E) 0.0275 kg

(Total for Question 17 is 1 mark)

18 Question 18. A box contains 6 red, 8 blue and 6 green cubes. A cube is picked at random. What is the probability it is green? Give your answer as a fraction in its simplest form.

- ☐ A) $\frac{3}{10}$
- ☐ B) $\frac{2}{5}$
- ☐ C) $\frac{1}{4}$
- ☐ D) $\frac{3}{20}$
- ☐ E) $\frac{1}{2}$

(Total for Question 18 is 1 mark)

19 Question 19. Find the next number in the sequence: 5, 9, 17, 33, 65, ____

- ☐ A) 97
- ☐ B) 121
- ☐ C) 125
- ☐ D) 129
- ☐ E) 130

(Total for Question 19 is 1 mark)

20 Question 20. Freya buys 2 pasties at £3.40 each and a drink for £1.10 at a Totnes market stall. She pays with a £10 note. How much change does she receive?

- ☐ A) £1.90
- ☐ B) £2.00
- ☐ C) £2.10
- ☐ D) £2.20
- ☐ E) £3.10

(Total for Question 20 is 1 mark)

21 Question 21 (harder). A coach travels 126 miles in 1 hour 45 minutes. What is its average speed in miles per hour?

- ☐ A) 66 mph
- ☐ B) 68 mph
- ☐ C) 70 mph
- ☐ D) 72 mph
- ☐ E) 76 mph

(Total for Question 21 is 1 mark)

22 Question 22 (harder). Three numbers are in the ratio 2:5:8. The largest number is 54 more than the smallest. What is the middle number?

- ☐ A) 27
- ☐ B) 36
- ☐ C) 45
- ☐ D) 54
- ☐ E) 63

(Total for Question 22 is 1 mark)

23 Question 23 (harder). A drum holds 360 litres. Ethan empties $\frac{1}{4}$ of it into tank A, then $\frac{2}{5}$ of what remains into tank B. How many litres are left?

- ☐ A) 90 litres
- ☐ B) 108 litres
- ☐ C) 144 litres
- ☐ D) 162 litres
- ☐ E) 180 litres

(Total for Question 23 is 1 mark)

24 Question 24 (harder). After a 12% pay rise, Oliver earns £36 more per week than before. What was his weekly pay before the rise?

- ☐ A) £264
- ☐ B) £276
- ☐ C) £288
- ☐ D) £300
- ☐ E) £312

(Total for Question 24 is 1 mark)

25 Question 25 (hardest, final question). Isla has £96. She spends $\frac{3}{8}$ of it on trainers, then $\frac{1}{4}$ of what remains on a cap. How much money does she have left?

- ☐ A) £15
- ☐ B) £21
- ☐ C) £36
- ☐ D) £45
- ☐ E) £60

(Total for Question 25 is 1 mark)

26 SECTION 2: VERBAL REASONING (20 minutes, 25 questions across mixed named types)

Question 26 (Compound words). Find the word that completes both: SUN ____ HOUSE, so that it finishes the first word and starts the second.

- ☐ A) LIGHT
- ☐ B) SET
- ☐ C) RISE
- ☐ D) FLOWER
- ☐ E) SHINE

(Total for Question 26 is 1 mark)

27 Question 27 (Compound words). Find the word that completes both: FIRE ____ SHOP, so that it finishes the first word and starts the second.

- ☐ A) WORK
- ☐ B) PLACE
- ☐ C) ARM
- ☐ D) CRACKER
- ☐ E) FLY

(Total for Question 27 is 1 mark)

28 Question 28 (Word connections). Wing is to Bird as Fin is to ____?

- ☐ A) Fish
- ☐ B) Shark
- ☐ C) Ocean
- ☐ D) Scale
- ☐ E) Water

(Total for Question 28 is 1 mark)

29 Question 29 (Word connections). Author is to Book as Composer is to ____?

- ☐ A) Music
- ☐ B) Instrument
- ☐ C) Orchestra
- ☐ D) Piano
- ☐ E) Note

(Total for Question 29 is 1 mark)

30 Question 30 (Closest meaning). Which word means the same as 'ample'? Choose from: scarce, plentiful, narrow, brief.

- ☐ A) scarce
- ☐ B) plentiful
- ☐ C) narrow
- ☐ D) brief
- ☐ E) none of these

(Total for Question 30 is 1 mark)

31 Question 31 (Closest meaning). Which word means the same as 'reluctant'? Choose from: eager, unwilling, calm, swift.

- ☐ A) eager
- ☐ B) unwilling
- ☐ C) calm
- ☐ D) swift
- ☐ E) none of these

(Total for Question 31 is 1 mark)

32 Question 32 (Opposite meaning). Which word means the opposite of 'permit'? Choose from: allow, forbid, request, encourage.

- ☐ A) allow
- ☐ B) forbid
- ☐ C) request
- ☐ D) encourage
- ☐ E) none of these

(Total for Question 32 is 1 mark)

33 Question 33 (Opposite meaning). Which word means the opposite of 'genuine'? Choose from: real, fake, honest, sincere.

- ☐ A) real
- ☐ B) fake
- ☐ C) honest
- ☐ D) sincere
- ☐ E) none of these

(Total for Question 33 is 1 mark)

34 Question 34 (Odd one out). Which word does not belong with the others: trout, salmon, dolphin, mackerel, herring?

- ☐ A) trout
- ☐ B) salmon
- ☐ C) dolphin
- ☐ D) mackerel
- ☐ E) herring

(Total for Question 34 is 1 mark)

35 Question 35 (Odd one out). Which number does not belong with the others: 16, 25, 36, 40, 49?

- ☐ A) 16
- ☐ B) 25
- ☐ C) 36
- ☐ D) 40
- ☐ E) 49

(Total for Question 35 is 1 mark)

36 Question 36 (Hidden word). A four-letter word is hidden between these two words, using the last letter of the first word and the first three letters of the second word. Find the hidden word.
BUS EATER

- ☐ A) SEAT
- ☐ B) BEAT
- ☐ C) SEAR
- ☐ D) BEAR
- ☐ E) EATS

(Total for Question 36 is 1 mark)

37 Question 37 (Hidden word). A four-letter word is hidden between these two words, using the last letter of the first word and the first three letters of the second word. Find the hidden word.
ATTIC OATMEAL

- ☐ A) COAT
- ☐ B) CART
- ☐ C) COAL
- ☐ D) MOAT
- ☐ E) OATS

(Total for Question 37 is 1 mark)

38 Question 38 (Letter sequences). Look at this series of letters: C, F, I, L, ?. Which letter completes the series?

- ☐ A) M
- ☐ B) N
- ☐ C) O
- ☐ D) P
- ☐ E) Q

(Total for Question 38 is 1 mark)

39 Question 39 (Letter sequences). Look at this series of letters: Y, W, U, S, ?. Which letter comes next?

- ☐ A) R
- ☐ B) Q
- ☐ C) P
- ☐ D) T
- ☐ E) O

(Total for Question 39 is 1 mark)

40 Question 40 (Number sequences). Look at this series of numbers: 7, 14, 28, 56, ?. Which number comes next?

- ☐ A) 84
- ☐ B) 98
- ☐ C) 105
- ☐ D) 112
- ☐ E) 120

(Total for Question 40 is 1 mark)

41 Question 41 (Number sequences). Look at this series of numbers: 100, 91, 83, 76, ?. Which number comes next?

- ☐ A) 68
- ☐ B) 69
- ☐ C) 70
- ☐ D) 71
- ☐ E) 72

(Total for Question 41 is 1 mark)

42 Question 42 (Number sequences, harder). Look at this series of numbers: 3, 8, 20, 46, ?. Which number comes next?

- ☐ A) 92
- ☐ B) 96
- ☐ C) 98
- ☐ D) 100
- ☐ E) 104

(Total for Question 42 is 1 mark)

43 Question 43 (Alphabet code). In a code, each letter is replaced by the letter 4 places later in the alphabet (so A becomes E, B becomes F, and so on). Using this code, how is the word BOAT written?

- ☐ A) FSEX
- ☐ B) FREX
- ☐ C) FSDX
- ☐ D) ESEX
- ☐ E) FSEW

(Total for Question 43 is 1 mark)

44 Question 44 (Alphabet code). In a code, each letter is written as the letter that is the same number of places from the end of the alphabet as the original letter is from the start (so A becomes Z, B becomes Y, and so on). Using this code, how is the word DUSK written?

- ☐ A) WFHP
- ☐ B) WFGP
- ☐ C) XFHP
- ☐ D) WEHP
- ☐ E) WFHQ

(Total for Question 44 is 1 mark)

45 Question 45 (Letter-for-number code). In a code, each letter represents a digit: S = 6, A = 2, N = 9, D = 4. Using this code, what four-digit number does SAND represent?

- ☐ A) 6294
- ☐ B) 6249
- ☐ C) 2694
- ☐ D) 6924
- ☐ E) 4926

(Total for Question 45 is 1 mark)

46 Question 46 (Letter-for-number code). In a code, each letter represents a digit: C = 3, O = 7, V = 5, E = 1. Using this code, what four-digit number does COVE represent?

- ☐ A) 3751
- ☐ B) 3715
- ☐ C) 7351
- ☐ D) 3157
- ☐ E) 1573

(Total for Question 46 is 1 mark)

47 Question 47 (Anagram). Rearrange the letters of CRATE to form a word meaning 'to respond to something'.

- ☐ A) REACT
- ☐ B) TRACE
- ☐ C) CATER
- ☐ D) CRATE
- ☐ E) CARTE

(Total for Question 47 is 1 mark)

48 Question 48 (Anagram). Rearrange the letters of NIGHT to form a word meaning 'an object or item'.

- ☐ A) THING
- ☐ B) NIGHT
- ☐ C) THIN
- ☐ D) NIGHTS
- ☐ E) TIGHT

(Total for Question 48 is 1 mark)

49 Question 49 (Logical deduction). Freya's father is Callum. Callum's only son is Joel. How is Joel related to Freya?

- ☐ A) brother
- ☐ B) father
- ☐ C) cousin
- ☐ D) uncle
- ☐ E) grandfather

(Total for Question 49 is 1 mark)

50 Question 50 (Logical deduction, final question). All the pupils who play chess also play backgammon. Leo plays backgammon but does not play chess. Which conclusion must be true?

- ☐ A) Leo plays chess
- ☐ B) Everyone who plays backgammon also plays chess
- ☐ C) Some backgammon players do not play chess
- ☐ D) No one plays both games
- ☐ E) Leo never plays games

(Total for Question 50 is 1 mark)

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Question 1

- **B1 B)** $7,905 - 4,258 + 3,647 = 7,905$ (cao)
- **Answer: B) 7,905**

Question 2

- **B1 B)** $3,348 - 6,102 - 2,754 = 3,348$ (cao)
- **Answer: B) 3,348**

Question 3

- **B1 A)** 39 - using order of operations, $9 \times 7 = 63$ and $3 \times 8 = 24$, then $63 - 24 = 39$ (cao)
- **Answer: A) 39**

Question 4

- **B1 A)** 54,600 - the last two digits, 37, are less than 50, so the value rounds down to 54,600 (cao)
- **Answer: A) 54,600**

Question 5

- **B1 B)** $13/20 - 0.65 = 65/100$, which simplifies to $13/20$ by dividing top and bottom by 5 (cao)
- **Answer: B) 13/20**

Question 6

- **B1 A)** 2:3 - the highest common factor of 54 and 81 is 27; $54/27 = 2$ and $81/27 = 3$ (cao)
- **Answer: A) 2:3**

Question 7

- **B1 C)** £91 - 10% of 260 = 26, so $35\% = 30\% + 5\% = 78 + 13 = 91$ (cao)
- **Answer: C) £91**

Question 8

- **B1 B)** 46 m - perimeter = $2 \times (14 + 9) = 2 \times 23 = 46$ m (cao)
- **Answer: B) 46 m**

Question 9

- **B1 C)** $7 - 6x = 35 + 7 = 42$, so $x = 42 / 6 = 7$ (cao)
- **Answer: C) 7**

Question 10

- **B1 B)** 16:05 - from 14:40 to 15:40 is 60 minutes, leaving 25 more minutes to add, giving 16:05 (cao)
- **Answer: B) 16:05**

Question 11

- **B1 D)** 42 - multiples of 6: 6,12,18,24,30,36,42; multiples of 14: 14,28,42; the smallest shared value is 42 (cao)
- **Answer: D) 42**

Question 12

- **B1 C)** 250 g - butter per scone = $150 / 6 = 25$ g, so 10 scones need $25 \times 10 = 250$ g (cao)
- **Answer: C) 250 g**

Question 13

- **B1 A)** $2 \frac{1}{6} - 3 \frac{5}{6} = 23/6$; $1 \frac{2}{3} = 10/6$; $23/6 - 10/6 = 13/6 = 2 \frac{1}{6}$ (cao)
- **Answer: A) 2 1/6**

Question 14

- **B1 C) 20** - total of six numbers = $6 \times 15 = 90$; sum of the five given = $9+14+17+11+19 = 70$; sixth number = $90-70 = 20$ (cao)
- **Answer: C) 20**

Question 15

- **B1 C) £90** - the sale price is 75% of the original: $0.75 \times 120 = 90$ (cao)
- **Answer: C) £90**

Question 16

- **B1 B) 144 degrees** - angle sum of a decagon = $(10-2) \times 180 = 1,440$, each interior angle = $1,440/10 = 144$ (cao)
- **Answer: B) 144 degrees**

Question 17

- **B1 B) 2.75 kg** - $1,000 \text{ g} = 1 \text{ kg}$, so $2,750 \text{ g} = 2,750 / 1,000 = 2.75 \text{ kg}$ (cao)
- **Answer: B) 2.75 kg**

Question 18

- **B1 A) 3/10** - total cubes = $6+8+6 = 20$; green cubes = 6; probability = $6/20 = 3/10$ (cao)
- **Answer: A) 3/10**

Question 19

- **B1 D) 129** - each term follows the rule 'double and subtract 1'; $65 \times 2 - 1 = 129$ (cao)
- **Answer: D) 129**

Question 20

- **B1 C) £2.10** - pasties cost $2 \times 3.40 = 6.80$; total spent = $6.80 + 1.10 = 7.90$; change = $10.00 - 7.90 = 2.10$ (cao)
- **Answer: C) £2.10**

Question 21

- **B1 D) 72 mph** - 1 hour 45 minutes = 1.75 hours; $126 / 1.75 = 72$ (cao)
- **Answer: D) 72 mph**

Question 22

- **B1 C) 45** - the largest minus smallest is $8x - 2x = 6x = 54$, so $x = 9$; the middle number = $5x = 45$ (cao)
- **Answer: C) 45**

Question 23

- **B1 D) 162 litres** - tank A takes $1/4 \times 360 = 90$, leaving 270; tank B takes $2/5 \times 270 = 108$, leaving $270-108=162$ (cao)
- **Answer: D) 162 litres**

Question 24

- **B1 D) £300** - original pay = $36 / 0.12 = 300$ (cao)
- **Answer: D) £300**

Question 25

- **B1 D) £45** - trainers cost $3/8 \times 96 = 36$, leaving 60; cap costs $1/4 \times 60 = 15$, leaving $60-15=45$ (cao)
- **Answer: D) £45**

Question 26

- **B1 A) LIGHT** - SUNLIGHT and LIGHTHOUSE are both real words (cao)
- **Answer: A) LIGHT**

Question 27

- **B1 A) WORK** - FIREWORK and WORKSHOP are both real words (cao)
- **Answer: A) WORK**

Question 28

- **B1 A)** Fish - a wing is part of a bird's body, in the same way that a fin is part of a fish's body (cao)
- **Answer: A) Fish**

Question 29

- **B1 A)** Music - an author creates a book, in the same way that a composer creates music (cao)
- **Answer: A) Music**

Question 30

- **B1 B)** plentiful cao
- **Answer: B) plentiful**

Question 31

- **B1 B)** unwilling cao
- **Answer: B) unwilling**

Question 32

- **B1 B)** forbid cao
- **Answer: B) forbid**

Question 33

- **B1 B)** fake cao
- **Answer: B) fake**

Question 34

- **B1 C)** dolphin cao
- **Answer: C) dolphin**

Question 35

- **B1 D)** 40 cao
- **Answer: D) 40**

Question 36

- **B1 A)** SEAT cao
- **Answer: A) SEAT**

Question 37

- **B1 A)** COAT cao
- **Answer: A) COAT**

Question 38

- **B1 C)** O cao
- **Answer: C) O**

Question 39

- **B1 B)** Q cao
- **Answer: B) Q**

Question 40

- **B1 D)** 112 cao
- **Answer: D) 112**

Question 41

- **B1 C)** 70 cao
- **Answer: C) 70**

Question 42

- **B1 D) 100** cao
- **Answer: D) 100**

Question 43

- **B1 A) FSEX** cao
- **Answer: A) FSEX**

Question 44

- **B1 A) WFHP** cao
- **Answer: A) WFHP**

Question 45

- **B1 A) 6294** cao
- **Answer: A) 6294**

Question 46

- **B1 A) 3751** cao
- **Answer: A) 3751**

Question 47

- **B1 A) REACT** cao
- **Answer: A) REACT**

Question 48

- **B1 A) THING** cao
- **Answer: A) THING**

Question 49

- **B1 A) brother** cao
- **Answer: A) brother**

Question 50

- **B1 C) Some backgammon players do not play chess - cao**
- **Answer: C) Some backgammon players do not play chess**