



EP.T69 Wiltshire-Style Maths and Reasoning Mock

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

Total Marks

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Name: _____ Date: ____ / ____ / ____

WILTSHIRE-STYLE MATHS AND REASONING MOCK. This pack reproduces the multiple-choice format used by GL Assessment for Wiltshire's grammar school 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 $4,586 + 3,725$.

- ☐ A) 8,211
- ☐ B) 8,311
- ☐ C) 8,321
- ☐ D) 8,411
- ☐ E) 7,311

(Total for Question 1 is 1 mark)

2 Question 2. Work out $6,304 - 2,867$.

- ☐ A) 3,337
- ☐ B) 3,537
- ☐ C) 3,437
- ☐ D) 3,447
- ☐ E) 4,437

(Total for Question 2 is 1 mark)

3 Question 3. Work out $7 \times 8 - 4 \times 6$.

- ☐ A) 32
- ☐ B) 30
- ☐ C) 36
- ☐ D) 48
- ☐ E) 18

(Total for Question 3 is 1 mark)

4 Question 4. Round 53,482 to the nearest hundred.

- ☐ A) 53,400
- ☐ B) 53,500
- ☐ C) 53,450
- ☐ D) 53,000
- ☐ E) 54,000

(Total for Question 4 is 1 mark)

5 Question 5. Write 0.72 as a fraction in its simplest form.

- ☐ A) $\frac{72}{100}$
- ☐ B) $\frac{18}{25}$
- ☐ C) $\frac{4}{5}$
- ☐ D) $\frac{25}{18}$
- ☐ E) $\frac{7}{2}$

(Total for Question 5 is 1 mark)

6 Question 6. Simplify the ratio 63:84.

- ☐ A) 3:4
- ☐ B) 9:12
- ☐ C) 21:28
- ☐ D) 4:3
- ☐ E) 5:6

(Total for Question 6 is 1 mark)

7 Question 7. Find 45% of £220.

- ☐ A) £88
- ☐ B) £90
- ☐ C) £94
- ☐ D) £99
- ☐ E) £110

(Total for Question 7 is 1 mark)

8 Question 8. A field near Salisbury measures 16 m by 11 m. Work out its perimeter.

- ☐ A) 27 m
- ☐ B) 176 m
- ☐ C) 54 m
- ☐ D) 58 m
- ☐ E) 43 m

(Total for Question 8 is 1 mark)

9 Question 9. Solve for x: $7x - 5 = 44$.

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

(Total for Question 9 is 1 mark)

10 Question 10. A coach leaves Salisbury bus station at 15:20 and the journey takes 95 minutes. What time does it arrive?

- ☐ A) 16:35
- ☐ B) 16:45
- ☐ C) 16:50
- ☐ D) 16:55
- ☐ E) 17:05

(Total for Question 10 is 1 mark)

11 Question 11. What is the lowest common multiple of 9 and 12?

- ☐ A) 21
- ☐ B) 36
- ☐ C) 3
- ☐ D) 108
- ☐ E) 24

(Total for Question 11 is 1 mark)

12 Question 12. A recipe uses 180 g of flour to make 5 servings. How much flour is needed for 8 servings?

- ☐ A) 252 g
- ☐ B) 270 g
- ☐ C) 288 g
- ☐ D) 306 g
- ☐ E) 324 g

(Total for Question 12 is 1 mark)

13 Question 13. Work out $5\frac{1}{4} - 2\frac{5}{6}$.

- ☐ A) $2\frac{5}{12}$
- ☐ B) $2\frac{7}{12}$
- ☐ C) $3\frac{5}{12}$
- ☐ D) $1\frac{5}{12}$
- ☐ E) $8\frac{1}{12}$

(Total for Question 13 is 1 mark)

14 Question 14. The mean of six numbers is 17. Five of the numbers are 12, 19, 14, 21 and 16. What is the sixth number?

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

(Total for Question 14 is 1 mark)

15 Question 15. A coat priced at £150 is reduced by 30% in a sale. What is the sale price?

- ☐ A) £45
- ☐ B) £105
- ☐ C) £120
- ☐ D) £127.50
- ☐ E) £135

(Total for Question 15 is 1 mark)

16 Question 16. What is the size of each interior angle of a regular nonagon (9 sides)?

- ☐ A) 135 degrees
- ☐ B) 144 degrees
- ☐ C) 150 degrees
- ☐ D) 156 degrees
- ☐ E) 140 degrees

(Total for Question 16 is 1 mark)

17 Question 17. Convert 4,200 grams to kilograms.

- ☐ A) 0.42 kg
- ☐ B) 4.2 kg
- ☐ C) 42 kg
- ☐ D) 420 kg
- ☐ E) 0.042 kg

(Total for Question 17 is 1 mark)

18 Question 18. A box contains 5 red, 7 blue and 8 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) $\frac{1}{4}$
- ☐ C) $\frac{2}{5}$
- ☐ D) $\frac{7}{20}$
- ☐ E) $\frac{3}{4}$

(Total for Question 18 is 1 mark)

19 Question 19. Find the next number in the sequence: 4, 9, 19, 39, 79, ____

- ☐ A) 149
- ☐ B) 158
- ☐ C) 157
- ☐ D) 159
- ☐ E) 161

(Total for Question 19 is 1 mark)

20 Question 20. At a Wiltshire market stall, Hannah buys 2 items at £2.75 each and a drink for £1.35. She pays with a £10 note. How much change does she receive?

- ☐ A) £2.90
- ☐ B) £3.15
- ☐ C) £3.25
- ☐ D) £3.35
- ☐ E) £4.15

(Total for Question 20 is 1 mark)

21 Question 21 (harder). A cyclist travels 108 miles in 1 hour 30 minutes. What is her average speed in miles per hour?

- ☐ A) 66 mph
- ☐ B) 68 mph
- ☐ C) 72 mph
- ☐ D) 76 mph
- ☐ E) 80 mph

(Total for Question 21 is 1 mark)

22 Question 22 (harder). Three numbers are in the ratio 3:5:9. The largest number is 54 more than the smallest. What is the middle number?

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

(Total for Question 22 is 1 mark)

23 Question 23 (harder). A drum holds 420 litres. Ellis empties $\frac{1}{4}$ of it into tank A, then $\frac{2}{7}$ of what remains into tank B. How many litres are left?

- ☐ A) 105 litres
- ☐ B) 210 litres
- ☐ C) 90 litres
- ☐ D) 225 litres
- ☐ E) 240 litres

(Total for Question 23 is 1 mark)

24 Question 24 (harder). After an 8% pay rise, Priya earns £28 more per week than before. What was her weekly pay before the rise?

- ☐ A) £322
- ☐ B) £329
- ☐ C) £336
- ☐ D) £343
- ☐ E) £350

(Total for Question 24 is 1 mark)

25 Question 25 (hardest, final question). Freya has £120. She spends $\frac{1}{4}$ of it on a bicycle helmet, then $\frac{2}{5}$ of what remains on a bike light. How much money does she have left?

- ☐ A) £30
- ☐ B) £36
- ☐ C) £54
- ☐ D) £90
- ☐ 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: CARD ____ WALK, so that it finishes the first word and starts the second.

- ☐ A) GAME
- ☐ B) BOARD
- ☐ C) SHARK
- ☐ D) STOCK
- ☐ E) HOLDER

(Total for Question 26 is 1 mark)

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

- ☐ A) BAND
- ☐ B) HOLE
- ☐ C) CHAIR
- ☐ D) REST
- ☐ E) LOCK

(Total for Question 27 is 1 mark)

28 Question 28 (Word connections). Petal is to Flower as Page is to ____?

- ☐ A) Library
- ☐ B) Book
- ☐ C) Chapter
- ☐ D) Word
- ☐ E) Author

(Total for Question 28 is 1 mark)

29 Question 29 (Word connections). Sculptor is to Statue as Architect is to ____?

- ☐ A) Blueprint
- ☐ B) Brick
- ☐ C) City
- ☐ D) Building
- ☐ E) Design

(Total for Question 29 is 1 mark)

30 Question 30 (Closest meaning). Which word means the same as 'diligent'? Choose from: lazy, hardworking, careless, timid.

- ☐ A) lazy
- ☐ B) hardworking
- ☐ C) careless
- ☐ D) timid
- ☐ E) none of these

(Total for Question 30 is 1 mark)

31 Question 31 (Closest meaning). Which word means the same as 'concise'? Choose from: brief, lengthy, vague, loud.

- ☐ A) brief
- ☐ B) lengthy
- ☐ C) vague
- ☐ D) loud
- ☐ E) none of these

(Total for Question 31 is 1 mark)

32 Question 32 (Opposite meaning). Which word means the opposite of 'generous'? Choose from: kind, stingy, wealthy, cheerful.

- ☐ A) kind
- ☐ B) stingy
- ☐ C) wealthy
- ☐ D) cheerful
- ☐ E) none of these

(Total for Question 32 is 1 mark)

33 Question 33 (Opposite meaning). Which word means the opposite of 'ancient'? Choose from: old, modern, historic, ruined.

- ☐ A) old
- ☐ B) modern
- ☐ C) historic
- ☐ D) ruined
- ☐ 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: oak, maple, birch, sparrow, willow?

- ☐ A) oak
- ☐ B) maple
- ☐ C) birch
- ☐ D) sparrow
- ☐ E) willow

(Total for Question 34 is 1 mark)

35 Question 35 (Odd one out). Which number does not belong with the others: 8, 27, 64, 90, 125?

- ☐ A) 8
- ☐ B) 27
- ☐ C) 64
- ☐ D) 90
- ☐ E) 125

(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.
FLOOR ANTLER

- ☐ A) RANT
- ☐ B) RANK
- ☐ C) PANT
- ☐ D) RATS
- ☐ E) RAND

(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.
GAS CARROT

- ☐ A) SCAB
- ☐ B) STAR
- ☐ C) SCAR
- ☐ D) SCAT
- ☐ E) CARS

(Total for Question 37 is 1 mark)

38 Question 38 (Letter sequences). Look at this series of letters: D, H, L, P, ?. Which letter completes the series?

- ☐ A) R
- ☐ B) T
- ☐ C) S
- ☐ D) V
- ☐ E) U

(Total for Question 38 is 1 mark)

39 Question 39 (Letter sequences). Look at this series of letters: Z, X, V, T, ?. Which letter comes next?

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

(Total for Question 39 is 1 mark)

40 Question 40 (Number sequences). Look at this series of numbers: 5, 11, 23, 47, ?. Which number comes next?

- ☐ A) 89
- ☐ B) 91
- ☐ C) 93
- ☐ D) 95
- ☐ E) 96

(Total for Question 40 is 1 mark)

41 Question 41 (Number sequences). Look at this series of numbers: 200, 182, 165, 149, ?. Which number comes next?

- ☐ A) 130
- ☐ B) 132
- ☐ C) 134
- ☐ D) 136
- ☐ E) 138

(Total for Question 41 is 1 mark)

42 Question 42 (Number sequences, harder). Look at this series of numbers: 4, 6, 10, 18, 34, ?. Which number comes next?

- ☐ A) 50
- ☐ B) 58
- ☐ C) 62
- ☐ D) 64
- ☐ E) 66

(Total for Question 42 is 1 mark)

43 Question 43 (Alphabet code). In a code, each letter is replaced by the letter 5 places later in the alphabet (so A becomes F, B becomes G, and so on). Using this code, how is the word LAMP written?

- ☐ A) QFRU
- ☐ B) QFRT
- ☐ C) PFRU
- ☐ D) QGRU
- ☐ E) QFQU

(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 GOLF written?

- ☐ A) TLPU
- ☐ B) SLOU
- ☐ C) TKOU
- ☐ D) TLOU
- ☐ E) TLOV

(Total for Question 44 is 1 mark)

45 Question 45 (Letter-for-number code). In a code, each letter represents a digit: T = 5, R = 8, I = 3, P = 6. Using this code, what four-digit number does TRIP represent?

- ☐ A) 5863
- ☐ B) 5836
- ☐ C) 8536
- ☐ D) 5638
- ☐ E) 6835

(Total for Question 45 is 1 mark)

46 Question 46 (Letter-for-number code). In a code, each letter represents a digit: P = 6, L = 9, U = 2, M = 7. Using this code, what four-digit number does PLUM represent?

- ☐ A) 6927
- ☐ B) 6297
- ☐ C) 9627
- ☐ D) 6792
- ☐ E) 7296

(Total for Question 46 is 1 mark)

47 Question 47 (Anagram). Rearrange the letters of TEARS to form a word meaning 'to gaze fixedly'.

- ☐ A) RATES
- ☐ B) TEARS
- ☐ C) STARE
- ☐ D) TASER
- ☐ E) RESAT

(Total for Question 47 is 1 mark)

48 Question 48 (Anagram). Rearrange the letters of LISTEN to form a word meaning 'a sparkling decorative material used at Christmas'.

- ☐ A) TINSEL
- ☐ B) LISTEN
- ☐ C) SILENT
- ☐ D) ENLIST
- ☐ E) INLETS

(Total for Question 48 is 1 mark)

49 Question 49 (Logical deduction). Ravi's mother is Priya. Priya's only daughter is Sara. How is Sara related to Ravi?

- ☐ A) sister
- ☐ B) mother
- ☐ C) cousin
- ☐ D) aunt
- ☐ E) grandmother

(Total for Question 49 is 1 mark)

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

- ☐ A) Noah plays the violin
- ☐ B) Everyone who plays the piano also plays the violin
- ☐ C) Some piano players do not play the violin
- ☐ D) No one plays both instruments
- ☐ E) Noah never plays any instrument

(Total for Question 50 is 1 mark)

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Question 1

- **B1 B)** $8,311 - 4,586 + 3,725 = 8,311$ (cao)
- **Answer: B) 8,311**

Question 2

- **B1 C)** $3,437 - 6,304 - 2,867 = 3,437$ (cao)
- **Answer: C) 3,437**

Question 3

- **B1 A)** 32 - using order of operations, $7 \times 8 = 56$ and $4 \times 6 = 24$, then $56 - 24 = 32$ (cao)
- **Answer: A) 32**

Question 4

- **B1 B)** 53,500 - the last two digits, 82, are more than halfway to the next hundred, so the value rounds up to 53,500 (cao)
- **Answer: B) 53,500**

Question 5

- **B1 B)** $18/25 - 0.72 = 72/100$, which simplifies to $18/25$ by dividing top and bottom by 4 (cao)
- **Answer: B) 18/25**

Question 6

- **B1 A)** 3:4 - the highest common factor of 63 and 84 is 21; $63/21 = 3$ and $84/21 = 4$ (cao)
- **Answer: A) 3:4**

Question 7

- **B1 D)** £99 - 10% of 220 = 22, so $45\% = 40\% + 5\% = 88 + 11 = 99$ (cao)
- **Answer: D) £99**

Question 8

- **B1 C)** 54 m - perimeter = $2 \times (16 + 11) = 2 \times 27 = 54$ m (cao)
- **Answer: C) 54 m**

Question 9

- **B1 C)** $7 - 7x = 44 + 5 = 49$, so $x = 49 / 7 = 7$ (cao)
- **Answer: C) 7**

Question 10

- **B1 D)** 16:55 - from 15:20 to 16:20 is 60 minutes, leaving 35 more minutes to add, giving 16:55 (cao)
- **Answer: D) 16:55**

Question 11

- **B1 B)** 36 - multiples of 9: 9,18,27,36; multiples of 12: 12,24,36; the smallest shared value is 36 (cao)
- **Answer: B) 36**

Question 12

- **B1 C)** 288 g - flour per serving = $180 / 5 = 36$ g, so 8 servings need $36 \times 8 = 288$ g (cao)
- **Answer: C) 288 g**

Question 13

- **B1 A)** $2 \frac{5}{12} - 5 \frac{1}{4} = 63/12$; $2 \frac{5}{6} = 34/12$; $63/12 - 34/12 = 29/12 = 2 \frac{5}{12}$ (cao)
- **Answer: A) $2 \frac{5}{12}$**

Question 14

- **B1 D) 20** - total of six numbers = $6 \times 17 = 102$; sum of the five given = $12+19+14+21+16 = 82$; sixth number = $102-82 = 20$ (cao)
- **Answer: D) 20**

Question 15

- **B1 B) £105** - the sale price is 70% of the original: $0.7 \times 150 = 105$ (cao)
- **Answer: B) £105**

Question 16

- **B1 E) 140 degrees** - angle sum of a nonagon = $(9-2) \times 180 = 1,260$, each interior angle = $1,260/9 = 140$ (cao)
- **Answer: E) 140 degrees**

Question 17

- **B1 B) 4.2 kg** - $1,000 \text{ g} = 1 \text{ kg}$, so $4,200 \text{ g} = 4,200 / 1,000 = 4.2 \text{ kg}$ (cao)
- **Answer: B) 4.2 kg**

Question 18

- **B1 C) $2/5$** - total cubes = $5+7+8 = 20$; green cubes = 8; probability = $8/20 = 2/5$ (cao)
- **Answer: C) $2/5$**

Question 19

- **B1 D) 159** - each term follows the rule 'double and add 1'; $79 \times 2 + 1 = 159$ (cao)
- **Answer: D) 159**

Question 20

- **B1 B) £3.15** - items cost $2 \times 2.75 = 5.50$; total spent = $5.50 + 1.35 = 6.85$; change = $10.00 - 6.85 = 3.15$ (cao)
- **Answer: B) £3.15**

Question 21

- **B1 C) 72 mph** - 1 hour 30 minutes = 1.5 hours; $108 / 1.5 = 72$ (cao)
- **Answer: C) 72 mph**

Question 22

- **B1 A) 45** - the largest minus smallest is $9x - 3x = 6x = 54$, so $x = 9$; the middle number = $5x = 45$ (cao)
- **Answer: A) 45**

Question 23

- **B1 D) 225 litres** - tank A takes $1/4 \times 420 = 105$, leaving 315; tank B takes $2/7 \times 315 = 90$, leaving $315-90=225$ (cao)
- **Answer: D) 225 litres**

Question 24

- **B1 E) £350** - original pay = $28 / 0.08 = 350$ (cao)
- **Answer: E) £350**

Question 25

- **B1 C) £54** - helmet costs $1/4 \times 120 = 30$, leaving 90; light costs $2/5 \times 90 = 36$, leaving $90-36=54$ (cao)
- **Answer: C) £54**

Question 26

- **B1 B) BOARD** - CARDBOARD and BOARDWALK are both real words (cao)
- **Answer: B) BOARD**

Question 27

- **B1 C) CHAIR** - ARMCHAIR and CHAIRMAN are both real words (cao)
- **Answer: C) CHAIR**

Question 28

- **B1 B) Book** - a petal is part of a flower, in the same way that a page is part of a book (cao)
- **Answer: B) Book**

Question 29

- **B1 D) Building** - a sculptor creates a statue, in the same way that an architect creates a building (cao)
- **Answer: D) Building**

Question 30

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

Question 31

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

Question 32

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

Question 33

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

Question 34

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

Question 35

- **B1 D) 90** cao
- **Answer: D) 90**

Question 36

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

Question 37

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

Question 38

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

Question 39

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

Question 40

- **B1 D) 95** cao
- **Answer: D) 95**

Question 41

- **B1 C) 134** cao
- **Answer: C) 134**

Question 42

- **B1 E) 66** cao
- **Answer: E) 66**

Question 43

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

Question 44

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

Question 45

- **B1 B) 5836** cao
- **Answer: B) 5836**

Question 46

- **B1 A) 6927** cao
- **Answer: A) 6927**

Question 47

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

Question 48

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

Question 49

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

Question 50

- **B1 C) Some piano players do not play the violin** - cao
- **Answer: C) Some piano players do not play the violin**