



**BROAD HORIZON**  
— TUITION CENTRE —

# **Mock Exam 3**

# **ANSWERS**

**Year 5**

**GL Practice Papers**

## **Broad Horizon Tuition**

Please don't hesitate to contact us at  
info@BHT11plus.co.uk if you have any questions or queries.

Visit us at [www.BHT11plus.co.uk](http://www.BHT11plus.co.uk)  
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# Teacher's Guide

## Mock Exams

### 1) Timing

Each section is individually timed. Timings are written on the teachers answer sheet (at the end of this guide).

Practice questions are completed outside of the time limit.

Students must get used to working out their **start and end times** and jotting them down on their exam paper, for every single section. Teachers must not tell students the start and end times, they need to work it out for themselves.

**E.g.**

Start 11:07

End 11:22

Might be a good idea to stop their time 30 seconds into the section and check who did and did not work out their start and end times (the vast majority won't have, or they will only do it for the first section and forget about it for the rest of the mock). This calculation must **only** be done once their time has started, because they're not allowed to write anything outside of the time limit.

Students **cannot** manage their time if they don't even know what time they're going to finish, and they cannot know what time they're going to finish if they don't know what time they started.

Every few minutes students should be **looking at the clock** so they know whether they're working too fast or too slow.

Also, for the really short sections, like NVR 3 minutes we don't advise they spend time writing down start and end times, since the time is so short, they can't afford to waste it, they should just look at the clock and know what time they're going to finish.

In the 11 plus exam, they won't have a digital timer on the board, they need to **get used to keeping an eye on the clock.**

The teacher should have their own digital timer which only they can see, maybe on their phone, or even on the tablet. Please turn off the TV screens so students can not use the digital time as they won't have this in their real exams.

Time limits are not so strict at this stage. It's their first mock exam. If they need a few extra minutes to finish, we can give them that. Timings will become stricter as the months go on with absolute strict timings around July/August.

You should **go straight into the mock exam** at the start of the lesson, do not start with marking homework, you'll run out of time on the mock.

Keep in mind it will take about 25/30 minutes to read out the answers and collect in the scores.

The mock exam itself will take about 90 minutes plus 30 minutes marking and collecting scores plus break in between, plus the extra time, this will easily take up the majority of the lesson.



### 3) Marking and Cheating

The pressure of achieving good scores **will** cause students to cheat whilst marking their work even if they seem like the type not to cheat. We've learnt over the years there isn't a type who cheat, when the pressure is on – they are all capable of it. Every year we see some of the most intelligent students, very capable, yet perform poorly on the exams because they cannot handle the pressure. Unfortunately, the pressure comes hand in hand with exams like the 11 plus and this is something we need students to get over as quickly as possible.

Anyone who gets over 45% their papers will be collected in and one of the admin team will re-mark their exam paper to double check them.

Please warn students about marking their work correctly before you start marking.

We need to get cheating out of their system very early on. We cannot help the students if we think they are doing really well, when the reality is otherwise.

All mock exams are self-marked in a different coloured pen (no peer marking, that has its own issues), so nobody should be seen holding a pencil whilst marking. They will often leave the boxes blank during the exam and then fill them in whilst you read out the answers and then tick them. Another common one is for them to write in multiple answers for 1 question and then tick them. Quite often they might only cheat on a few questions per section thinking it won't arouse suspicion, but those marks add up.

It might be a good idea to **collect in all the answering sheets** once you're done marking, and just have a quick flick through the pages.

#### 4) Lesson Format

It is likely the entire lesson will be spent on the mock exam.

Students must complete the entire mock exam before we mark. We don't mark after each section like in a normal lesson; students need to **get used to the intensity** of sitting two-1-hour papers. They can have their break around their usual break time, however, please ensure it's at the end of a section and we're not stopping in the middle of a section to have a break.

They'll be given a 2nd blank answering sheet, which they take home and re-attempt the entire paper again from scratch – this is the homework on a mock exam week.

At the start of the following lesson, you'll mark their 2nd attempt, log their 2nd attempt scores on excel, and then go through the entire mock exam **question by question and explain anything they've got wrong**. (If there happens to be time left, you'll start the next lesson pack.)

#### 5) Parent-Teacher Meetings

Meetings with parents will follow the first few mock exams, so we can **address any issues early on**.

We need to put plans in place for students who are struggling in specific areas, we can print extra content for them to cover at home, extra work for them to do during their holidays etc. Please let the manager know what work is needed and for which students so we can get this printed for them and **put a plan of action in place**.

Any plans put in place, please log them on **Trello** so the whole team is onboard and aware.

## 6) Students Answering Sheets

There is to be **no** working out on the answering sheet itself, answering sheets need to be clean. Working out on the exam paper only.

Students must rub out wrong answers and not cross them out.

Students must tick the answering sheet as they go along and not transfer their answers at the end, if they get used to transferring answers at the end and they run out of time, they could end up losing marks for entire sections.

Again, it might be a good idea to collect in all the answering sheets once you're done marking, and just have a quick flick through the pages.

## 7) Equipment

There is to be **no** use of **any** other equipment such as highlighters, pens, rulers, protractors etc.

Pencils and erasers only.



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## **Paper 1**

**Verbal Reasoning 1 – 9 Minutes**

**Non-Verbal 1:**

Subsection 1 – 3 Minutes

Subsection 2 – 3 Minutes

Subsection 3 – 3 Minutes

**English Comprehension 1 – 10 Minutes**

**Mathematics 1 – 15 Minutes**

## **Paper 2**

**Verbal Reasoning 2 – 9 Minutes**

**Non-Verbal 2:**

Subsection 1 – 3 Minutes

Subsection 2 – 3 Minutes

Subsection 3 – 3 Minutes

**English Comprehension 2 – 12 Minutes**

**Mathematics 2 – 15 Minutes**

# Birmingham and Warwickshire

## Test 3

### Paper 1 answers

#### Verbal Reasoning

##### Practice Questions

2. smash, break
4. LI
6. with empathy.

##### Subsection 1

1. reflect, mirror
2. clear, transparent
3. hard, difficult
4. schedule, timetable
5. vision, sight
6. flying, soaring

##### Subsection 2

7. KN
8. SU
9. RI
10. GW
11. LL
12. VK

##### Subsection 3

13. the rest
14. main chimney.
15. area definitely
16. yellow oven.
17. checked items.
18. weave stunningly

#### Non-verbal Reasoning

##### Subsection 1

Practice:

2. D

Test:

1. E
2. E

3. A
4. E
5. B
6. C

##### Subsection 2

Practice:

2. B

Test:

1. C
2. E
3. C
4. A
5. C
6. D

##### Spatial Reasoning

Practice:

2. A

Test:

1. C
2. A
3. E
4. C
5. B
6. D

#### English Comprehension

##### Practice Question

2. B

##### Comprehension

1. B
2. C
3. B
4. D
5. A
6. C
7. A
8. D
9. C

10. B  
11. C  
12. C

## Mathematics

### Practice Question

2. **D**

Step 1: think about your times tables.  
 $60 \div 10 = 6 = 10\%$  of 60, and 42 is in the 6 times table.

Step 2:  $6 \times 7 = 42$ , so  $42 = 70\%$  of 60.

### Mathematics

1. **B**

Step 1: Order the numbers, find the middle number(s). 4, 4, 5, 6, 7, 8, 9, 12.

Step 2: add the middle two numbers together and divide between 2 to find the median.

Step 3:  $7 + 6 = 13 \div 2 = 6.5$

2. **C**

Step 1:  $1731 - 865 = 866$

3. **B**

Step 1:  $25 - 17 = 8$

Step 2:  $8 \times 6 = 48$

Step 3:  $48 \div 3 = 16$

4. **D**

Step 1:  $\pounds 15 + \pounds 36 = \pounds 51$

Step 2:  $30\%$  of 51 =  $51 \times 30 = 1530$

Step 3:  $1530 \div 100 = 15.3 = \pounds 15.30$

5. **E**

Step 1: use BIDMAS to calculate the brackets first, and calculate multiplication before addition.

Step 2:  $7 \times 8 = 56$ .  $56 + 6 = 62$

Step 3:  $116 - 62 = 54$

6. **B**

Step 1:  $97.5 + 80 + 23 = 200.5$

Step 2: sum of all angles in a circle = 360, so  $360 - 200.5 = 159.5$

7. **E**

Step 1:  $112 \div 8 = 14$ , so  $x = 14$ .

Step 2:  $9y = 65 - 11 = 54$ . So  $y = 54 \div 9 = 6$

Step 3 =  $14 + 6 = 20$

8. **A**

Step 1: notice this is two sequences in one. The odd terms form their own sequence: 7, 12, 17, 22: increasing by 5 each time. The even terms form their own sequence: 8, 12, 16, 20: increasing by 4 each time.

Step 2:  $22 + 5 = 27$

9. **E**

Step 1:  $\frac{3}{7}$  of 70 =  $70 \div 7 \times 3 = 30$

Step 2:  $30\%$  of 70 =  $70 \div 10 \times 3 = 21$

Step 3:  $30 + 21 = 51$

Step 4:  $70 - 51 = 19$

10. **A**

Step 1:  $7 \times 15 = 105$

Step 2:  $12 \times 9 = 108$

Step 3:  $\frac{105}{108} = \frac{35}{36}$

11. **E**

Step 1: opposite sides of rectangles have equal lengths so two sides are 1000cm each.

Step 2:  $2600 - 2000$  (both length sides added together) = 600.  $600 \div 2 = 300\text{cm}$ .

Step 3:  $300\text{cm} = 3\text{m}$ .

12. **B**

Step 1: half of 7 minutes = 3m 30s

Step 2: half of 30s = 15s

Step 3:  $3\text{m } 30\text{s} + 15\text{s} = 3\text{m } 45\text{s}$

13. **A**

Step 1: prime numbers below 10 = 2,

3, 5, 7

Step 2:  $2 \times 3 \times 5 \times 7 = 210$

14. **C**

Step 1: four squared =  $4 \times 4 = 16$ ,

three cubed =  $3 \times 3 \times 3 = 27$

Step 2:  $16 + 27 = 43$

15. **C**

Step 1: This is a hexagon, which has 6 lines of symmetry and can be returned 6 times to its original shape.

This means it has a rotational symmetry of order 6.

16. **B**

Step 1: 20% of 30 =  $30 \div 5 = 6$ .

Step 2:  $\frac{2}{5}$  of 30:  $30 \div 5 = 6$ .  $6 \times 2 = 12$ .

Step 3:  $6 + 12 = 18$ .  $30 - 18 = 12$ , so 12 had cats.

Step 3: 12 is  $\frac{2}{5}$  or 40% of 30, so we need to find out 40% of  $360^\circ$ .  $360 \div 10 = 36$ .  $36 \times 4 = 144$ .

**END OF PAPER 1 ANSWERS**

## Paper 2 answers

### Verbal Reasoning

#### Practice Questions

2. left
4. essay
6. T

#### Subsection 1

1. Cake
2. Eggs
3. Scrubs
4. Laugh
5. Grow
6. Separate

#### Subsection 2

7. remote
8. evaporation
9. Turkey
10. villain
11. tables
12. lyric

#### Subsection 3

13. E
14. S
15. D
16. P
17. W
18. T

### Non-verbal Reasoning

#### Subsection 1

Practice:

2. A

Test:

1. D
2. D
3. C
4. E
5. D

6. A

#### Subsection 2

Practice:

2. A

Test:

1. B
2. E
3. D
4. B
5. E
6. C

### Spatial Reasoning

Practice:

2. A

Test:

1. A
2. E
3. C
4. D
5. B
6. B

### English Comprehension

#### Practice Question

2. B

#### Comprehension

1. A
2. B
3. D
4. E
5. C
6. C
7. C
8. C
9. E
10. A
11. A

- 12. D
- 13. D
- 14. D

1000 square metres.

Step 2:  $1000 \div 3 = 333.33\dots$ , so 333 cows can fit.

## Mathematics

### Practice Question

2. **C**

Step 1:  $13 \times 8 = 104$ ,  $13 \times 9 = 117$ , so 13 goes into 110 exactly 8 times.

### Mathematics

1. **A**

Step 1:  $14 + 7 + 31 = 52$ .  $100 - 52 = 48$ .

Step 2: 4 days left.  $48 \div 4 = 12$

2. **D**

Step 1: There are 7 days in a week and we start on a Tuesday, so after 7 days it will be a Tuesday again.

Therefore the 14<sup>th</sup> and 28<sup>th</sup> are also Tuesdays.  $28^{\text{th}} + \text{two days} = 30^{\text{th}}$ .

Tuesday + 2 days = Thursday.

3. **D**

Step 1:  $1000$  (1 litre in ml)  $\div 8 = 125$ . So  $1/8 = 125\text{ml}$ .

Step 2:  $125 \times 3 = 375$

4. **B**

Step 1:  $918 = 16x + x$  (Rahul has  $x$  marbles, and Robert has  $16x$ ). So  $918 = 17x$ .

Step 2:  $918 \div 17 = 54$  (Rahul's amount)

Step 3:  $918 - 54 = 864$  (Robert's amount)

5. **A**

Step 1: 2 hours = 120 minutes

Step 2:  $120 \div 5 = 24$

6. **D**

Step 1:  $50 \times 20 = 1000$ , his field =

7. **D**

Step 1:  $3 \times 3 = 9$ .  $9 \times 10 = 90$ .

Or: Step 1: height =  $3 \times 2 = 6$ . Length =  $3 \times 5 = 15$ .

Step 2:  $6 \times 15 = 90$ .

8. **E**

Step 1:  $13 \times 8 = 104$

Step 2:  $104 \times 365 = 37960$

9. **B**

$1891 - 735.63 = 1155.37$

10. **E**

Step 1: add up the frequencies to find that the total sample was 106.

Step 2: Note that 35 people voted for English.

Step 3: Find what percentage of 106 35 people is equal to. Use bus stop division. You can see that  $35 \div 106 = 0.3301\dots$

Step 4: You don't need to go any further than this, because this is 33.01...%, which must round down to 33%.

11. **C**

Step 1: isosceles triangles have two angles of the same size. So one angle must be  $40^\circ$ .

Step 2: All triangles have internal angles that add up to  $180^\circ$  so the second angle must be  $180 - 80 = 100$

12. **B**

Step 1: Use BIDMAS. Brackets first

Step 2: Within the brackets, indices first:  $4 \times 4 = 16$ .

Step 3: Then multiplication:  $9 \times 3 = 27$ .

Step 4: Then subtraction:  $16 - 27 =$

-11.

Step 5:  $-11 + 29 = 18$ .

13. **A**

Step 1:  $140 + 20 = 160$  (the average CO<sub>2</sub> emission in 2011).

Step 2: Percentage change: need to work out what percentage 20 is of 160.  $20/160 = 2/16 = 1/8$ .

Step 3:  $1/8$  is half of  $1/4$ .  $1/4 = 25\%$ .  
 $25\% \div 2 = 12.5\%$ .

14. **B**

Step 1:  $430 \div 100 = 43\text{p per } 100\text{g}$ .

Step 2:  $43 \times 7 = 301$ .  $301 \div 100 =$   
 $\text{£}3.01 \text{ per } 700\text{g}$ .

15. **E**

Step 1:  $12 + 7 + 4 = 23$

Step 2:  $7/23$  chance of picking a red pair.

16. **D**

Step 1: 60 minutes is 20 minutes  $\times 3$ .

In 60 minutes, he would have driven  $= 13 \times 3 = 39$  miles. Therefore his average speed is 39 mph.

**END OF PAPER 2 ANSWERS**