



BROAD HORIZON
— TUITION CENTRE —

Mock Exam 4

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
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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 – 8 Minutes

Non-Verbal 1:

Subsection 1 – 2 Minutes

Subsection 2 – 2 Minutes

Subsection 3 – 2 Minutes

English Comprehension 1 – 11 Minutes

Mathematics 1 – 15 Minutes

Paper 2

Verbal Reasoning 2 – 8 Minutes

Non-Verbal 2:

Subsection 1 – 2 Minutes

Subsection 2 – 2 Minutes

Subsection 3 – 2 Minutes

English Comprehension 2 – 11 Minutes

Mathematics 2 – 15 Minutes

Birmingham and Warwickshire Test 4

Paper 1 answers

Verbal Reasoning

Practice Questions

2. rest
4. choir, crowd
6. i

Subsection 1

1. sped
2. team
3. howl
4. loaf
5. epic
6. reel

Subsection 2

7. Lion, Orangutan
8. Happy, Joyous
9. Cake, Flour
10. Dragon, Unicorn
11. Clown, Goalkeeper
12. Swim, Sail

Subsection 3

13. l
14. r
15. i
16. h
17. o
18. t

Non-verbal Reasoning

Subsection 1

Practice:

2. C

Test:

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

Subsection 2

Practice:

2. E

Test:

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

Spatial Reasoning

Practice:

2. A

Test:

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

English Comprehension

Practice: B

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

9. D
10. A
11. C
12. B
13. C

Mathematics

Practice

2. **E**
Following BIDMAS, calculate inside the brackets first.
Step 1: $428 \times 12 = 5136$
Step 2: $22 + 5136 = 5158$

Mathematics

1. **D**
Step 1: $432.6 - 128.4 = 304.2$
2. **B**
Following BIDMAS, calculate inside the brackets first.
Step 1: $126 - 87 = 39$
Step 2: $6 \times 39 = 234$
Step 3: $234 \div 2 = 117$
3. **D**
Step 1: $\frac{4}{6} + \frac{8}{3} + \frac{5}{15} = \frac{20}{30} + \frac{80}{30} + \frac{10}{30} = \frac{110}{30}$
Step 2: $\frac{110}{30} = \frac{11}{3}$, simplify to $3\frac{2}{3}$
4. **C**
Step 1: $10 \times 20 \times 55 = 11000$
Step 2: $11000 \div 2 = 5500 \text{ cm}^3$
Step 3: $5500 \div 1000 = 5.5 \text{ mins}$
5. **B**
Each number in the sequence is the sum of the previous two numbers.
Step 1: $45 + 73 = 118$

6. **E**
Step 1: $2168.71 + 12.6 + 2.74 = 2184.05$
Step 2: The digit in the hundreds column of 2184.05 is 1
7. **A**
Step 1: the digits have moved five places to the right. This is equal to the number of zeros in one hundred-thousand.
8. **B**
Step 1: the digits have moved four places to the left. This is equal to the number of zeros in ten-thousand.
9. **C**
Although the last friend had not been to the park their data is still included within the calculation of the mean.
Step 1: $12 + 3 + 5 + 7 + 4 + 5 + 8 + 0 = 44$
Step 2: $44 \div 8 = 5.5$
10. **D**
Step 1: Calculate the area of one face of the cube $6 \times 6 = 36 \text{ cm}^2$
Step 2: Multiply this by the total number of faces $36 \times 6 = 216 \text{ cm}^2$
11. **E**
Step 1: $9 \times 7 \times 5 = 315$
Nonagon = 9 sides
Heptagon = 7 sides
Pentagon = 5 sides
12. **A**
 $23 + 37 + 17 + 31 + 11 + 43 = 162$
13. **D**
Step 1: $1 + 4 + 5 = 10$
Step 2: $\frac{1}{10} \frac{4}{10} \frac{5}{10}$
 $\frac{1}{10} \times 600 = \text{£}60$
 $\frac{4}{10} \times 600 = \text{£}240$

$$\frac{5}{10} \times 600 = \text{£}300$$

END OF PAPER 1 ANSWERS

14. **B**

1 litre = 1000 millilitres

Step 1: $0.67\text{l} = 670\text{ ml}$

Step 2: $670\text{ ml} - 245\text{ ml} = 425\text{ ml}$

Step 3: $425\text{ ml} = 0.425\text{l}$

15. **E**

Each number represents 30°

because $360 \div 12 = 30$.

Step 1: $30^\circ \times 5 = 150^\circ$ (clock 1)

Step 2: $30^\circ \times 2 = 60^\circ$ (clock 2)

Step 3: $150^\circ + 60^\circ = 210^\circ$

16. **C**

Step 1: $58 - 16 = 42$

$$a = 42$$

Step 2: Rearrange the equation. $225 - 42 = x + 12$.

Step 3: $225 - 42 = 183$

Step 3: $183 = x + 12$.

Step 4: $183 - 12 = x$

$$x = 171$$

17. **B**

Step 1: perimeter = sum of all sides

$$48 - 4 - 4 = 40\text{cm}$$

$40\text{cm} \div 2 = 20\text{cm}$ (length of other rectangle edge)

Step 2: volume = length x width x depth

$$20 \times 4 \times 4 = 320\text{cm}^3$$

18. **C**

Step 1: 42 of 210 pens are red

$42 \div 210 \times 100 = \%$ of red pens

$$42 \div 210 \times 100 = 42 \times 100 \div 210$$

Step 2: $42 \times 100 = 4200$

Step 3: $4200 \div 210 = 20$

20% are red pens

Step 4: $100 - 20 = 80\%$ non-red

Paper 2 answers

Verbal Reasoning

Practice Questions

2. calm, excited
4. house around
6. LOG

Subsection 1

1. consistent, irregular
2. ornate, plain
3. bitter, sweet
4. solid, liquid
5. destroy, create
6. freeze, melt

Subsection 2

7. need iced
8. than dancing.
9. the noise.
10. safe around
11. Little apples
12. gate stop

Subsection 3

13. BEE
14. TOM
15. TIN
16. HAT
17. OAK
18. TEA

Non-verbal Reasoning

Subsection 1

Practice:

2. C

Test:

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

6. E

Subsection 2

Practice:

2. A

Test:

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

Spatial Reasoning

Practice:

2. B

Test:

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

English Comprehension

Practice: D

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

Mathematics

Practice

2. **B**

Step 1: Work out what percentage of 1,500 660 is:

$$(660 \div 1,500) \times 100$$

Rewrite this as: $(660 \times 100) \div 1,500$

$$(660 \times 100) = 66,000$$

$$66,000 \div 1,500 = 44\%$$

Mathematics

1. **B**

$$\text{Step 1: } -1238 + 322 = -916$$

$$\text{Step 2: } -916 + -86 = -1002$$

2. **C**

$$\text{Step 1: } -28 \times -14 = 392$$

A negative multiplied by a negative makes a positive

$$\text{Step 2: } 56 + 392 = 448$$

3. **A**

Step 1: $\frac{1}{2}$ of the pie chart represents football so the remainder represents the other three sports $250 - 125 = 125$

$$\text{Step 2: } 125 - 41 - 16 = 68$$

Step 3: $\frac{68}{250}$ like basketball best, this is $\frac{34}{125}$ in its simplest form.

4. **D**

$$\text{Step 1: } 7 + 8 = 15$$

$$\text{Step 2: } 06:12 + 15 \text{ hours} = 21:12$$

5. **B**

To calculate the midpoint add both x values and divide by 2. Then add both y values and divide by 2.

$$\text{Step 1: } (-3 + 4) \div 2 = 0.5$$

$$\text{Step 2: } (3 + -2) \div 2 = 0.5$$

$$\text{Step 3: } (0.5, 0.5)$$

6. **A**

$$\text{Step 1: } \pounds 4.24 + \pounds 1.38 + \pounds 8.50 = \pounds 14.12$$

$$\text{Step 2: } \pounds 20 - \pounds 14.12 = \pounds 5.88$$

$$\text{Step 3: } 25\% \times \pounds 5.88 = \pounds 5.88 \div 4 = \pounds 1.47$$

$$\text{Step 4: } \pounds 5.88 - \pounds 1.47 = \pounds 4.41$$

7. **E**

$$720 \div 18 = 40$$

$$288 \div 18 = 16$$

$$126 \div 18 = 7$$

8. **B**

Angles inside an equilateral are each 60° (**b**) and on a straight line are 180°

$$\text{Step 1: } 180^\circ - 60^\circ = 120^\circ \text{ (a)}$$

c and d form a right angle as the shape is a rectangle

$$\text{Step 2: } 90^\circ - 34^\circ = 56^\circ \text{ (d)}$$

Angles inside a triangle add up to 180°

$$\text{Step 3: } 180^\circ - (90^\circ + 56^\circ) = 34^\circ \text{ (e)}$$

9. **C**

32 is the odd one out, it is the only number that isn't a square number.

10. **D**

Step 1: The question is asking you to calculate the lowest common multiple of 9 and 12.

Multiples of 9: 9, 18, 27, 36...

Multiples of 12: 12, 24, 36...

Step 2: So LCM = 36

11. **A**

$$\text{Step 1: } 12 \times 6 = 72$$

$$\text{Step 2: } 72 \times 2.54 = 182.88$$

Step 3: Round to 183 cm

12. **C**

Step 1: Calculate how many miles the train travelled per hour

$$108 \div 3 = 36$$

Step 2: *Divide the total journey by this number to calculate how long it took*

$$297 \div 36 = 8.25$$

8 hours, 15 mins

13. **E**

8972.631 is the largest

14. **B**

Step 1: $3 \times 16 = 48$

Step 2: $464 - 48 = 416 = 8x$

Step 3: $416 \div 8 = 52$

$$x = 52$$

15. **C**

Step 1: $7 + 3 = 10$

Step 2: 37 is the only prime number whose digits add up to 10

Step 3: The square of 37 is 1369

16. **A**

Step 1: After 10 weeks Jake will have collected £65 pocket money and earned £30 from mowing lawns.

$$£65 + £30 = £95.$$

Step 2: After 11 weeks he will have collected another £6.50. $£95 + £6.50 = £101.50$. Still too small.

Step 3: Therefore it will take 12 weeks.

17. **D**

Step 1: the digit following the 3rd decimal place is > 5 so the 3rd decimal place rounds up.

18. **D**

Step 1: $100\% - 25\% = 75\%$. So 225 is 75%.

Step 2: $225 \div 3 = 75 = 25\%$

Step 3: $100\% = 75 \times 4 = 300$ sweets

END OF PAPER 2 ANSWERS