



BROAD HORIZON
— T U I T I O N —

11+ Tuition

Year 4

Week 10

ANSWERS

Starter Task – Quick Revision

1) Add 75 minutes to 12:45pm.

2:00pm

2) What is the average of these times, 23.2 seconds, 30 seconds and 10.7 seconds?

21.3

3) Work out the difference between 67 minutes 37 seconds and 95 minutes 13 seconds.

27 Minutes and 36 Seconds

4) $85 - 158 =$

-73

5) $8 - 12 =$

-4

6) $11 - 15 =$

-4

7) $23 - 32 =$

-9

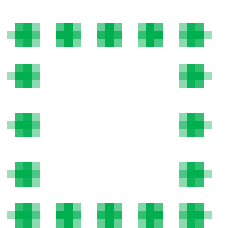
8) $8.27 \div 10,000 =$

0.000827

9) Convert 2130g to Kg

2.13kg

10) Convert 3.7L to ml



Exercise C

1. Fabulous
2. Penalty
3. Observe
4. Lifetime
5. Encourage
6. Inaccurate
7. Outlive
8. Oversee
9. Manufacture
10. Merciless

Name : _____

Answer key

Greatest Common Factor

MS1

Find the greatest common factor for each pair of numbers.

1) 28, 12

$$\text{Factors of 28} = \underline{1, 2, 4, 7, 14, 28}$$

$$\text{Factors of 12} = \underline{1, 2, 3, 4, 6, 12}$$

$$\text{GCF}(28, 12) = \underline{4}$$

2) 90, 30

$$\text{Factors of 90} = \underline{1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90}$$

$$\text{Factors of 30} = \underline{1, 2, 3, 5, 6, 10, 15, 30}$$

$$\text{GCF}(90, 30) = \underline{30}$$

3) 36, 54

$$\text{Factors of 36} = \underline{1, 2, 3, 4, 6, 9, 12, 18, 36}$$

$$\text{Factors of 54} = \underline{1, 2, 3, 6, 9, 18, 27, 54}$$

$$\text{GCF}(36, 54) = \underline{18}$$

4) 26, 52

$$\text{Factors of 26} = \underline{1, 2, 13, 26}$$

$$\text{Factors of 52} = \underline{1, 2, 4, 13, 26, 52}$$

$$\text{GCF}(26, 52) = \underline{26}$$

5) 21, 27

$$\text{Factors of 21} = \underline{1, 3, 7, 21}$$

$$\text{Factors of 27} = \underline{1, 3, 9, 27}$$

$$\text{GCF}(21, 27) = \underline{3}$$

Now try these. Work out the Highest Common Factor

1) 16 and 24

Highest Common factor = 8

2) 50 and 30

Highest Common factor = 10

3) 36 and 48

Highest Common factor = 12

4) 48 and 32

Highest Common factor = 16

5) 28 and 42

Highest Common factor = 14

Finding Common Multiples: Answers

question	answer
A.	
1	Multiples of 3: 3, 6, 9, 12 Multiples of 4: 4, 8, 12 LCM of 3 and 4 = 12
2	Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27 Multiples of 9: 9, 18, 27 LCM of 3 and 9 = 9
3	Multiples of 2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 Multiples of 5: 5, 10, 15, 20, 25 LCM of 2 and 5 = 10
4	Multiples of 8: 8, 16, 24, 32, 40, 48, 56, 64 Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32 LCM of 8 and 4 = 8
5	Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54 Multiples of 9: 9, 18, 27, 36, 45, 54, 63, 72, 81 LCM of 6 and 9 = 18
6	Multiples of 10: 10, 20, 30, 40, 50, 60, 70, 80 Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40 LCM of 10 and 5 = 10
7	Multiples of 11: 11, 22, 33, 44, 55, 66, 77, 88 Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66 LCM of 11 and 6 = 66
8	Multiples of 7: 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91 Multiples of 13: 13, 26, 39, 52, 65, 78, 91 LCM of 7 and 13 = 91
9	Multiples of 8: 8, 16, 24, 32, 40, 48 Multiples of 12: 12, 24, 36, 48, 60 LCM of 8 and 12 = 24
10	Multiples of 25: 25, 50, 75, 100, 125, 150, 175, 200 Multiples of 40: 40, 80, 120, 160, 200 LCM of 25 and 40 = 200

Comprehension Test 9

Q1 D

Noun

Q2 A

Basement

Q3 A

Verb

Q4 D

The land was flat and merged with the sky

Q5 C

The sun made the land hard

Q6 B

She had a sparkle in her eyes

Q7 B

Dorothy's laughter

Q8 D

Quiet

Q9 A

Adverb

Q10 E

Toto

TYPE NINE:

ATE	SON	POD
WON	ADO	SET
LOW	EAR	TRY
SAT	AGE	WON
MAT	EGO	TEN
ACT	TOE	EYE
ONE	REV	EWE
PIT	ARE	RED
WIT	ONE	END
ATE	NOW	TEE

PAGES 45-49 — ASSESSMENT TEST 4

1. **A** — *The size of the castles is not given as a reason why the Normans built motte and bailey castles.*
2. **B** — *In the passage it says "There were many buildings within the bailey, including stables, storerooms, kitchens and living quarters." Schools are not mentioned in the passage.*
3. **A** — *In the passage, a motte is described as a "natural or man-made mound" made using "earth from the ditch", and says that "the keep was on high ground". It is not described as a Roman fort.*
4. **D** — *In the passage it says "A wooden building called a 'keep' was built on top of the tall motte as a look-out point". A 'look-out' is a building used to watch for enemies.*
5. **C** — *In the passage it says that castles made of wood "caught fire easily" and that people started building stone castles because stone prevented them "from burning down".*
6. **D** — *"prevent" means 'stop'. Both words mean 'to hold someone back'.*
7. **B** — *"invaders" means 'attackers'. Both words mean 'a group who launch an assault'.*
8. **A** — *"made their mark on the land" means that the Normans 'changed the way the land looked'. By building many castles, the Normans changed the country.*
9. **glad** — *'Disappointed' means 'unhappy with a situation', whereas 'glad' means 'happy with a situation'.*
10. **silent** — *'Chatty' means 'talkative', whereas 'silent' means 'not speaking'.*
11. **rapid** — *'Slow' means 'at a low speed', whereas 'rapid' means 'at a high speed'.*
12. **humourless** — *'Witty' means 'funny', whereas 'humourless' means 'not funny'.*
13. **ungrateful** — *'Thankful' means 'appreciative', whereas 'ungrateful' means 'unappreciative'.*
14. **modern** — *'Traditional' means 'old-fashioned', whereas 'modern' means 'up-to-date'.*
15. **dry** — *'Juicy' means 'full of liquid', whereas 'dry' means 'without liquid'.*
16. **bland** — *'Tasty' means 'having a nice flavour', whereas 'bland' means 'without flavour'.*
17. **just** — *Both words mean 'impartial'.*
18. **ache** — *Both words mean 'physical suffering'.*
19. **amble** — *Both words mean 'walk slowly'.*
20. **stain** — *Both words mean 'colour'.*
21. **twirl** — *Both words mean 'turn quickly'.*
22. **portion** — *Both words mean 'a piece'.*
23. **dim** — *Both words mean 'not much light'.*
24. **guzzle** — *Both words mean 'eat quickly and noisily'.*
25. **relieve** — *Both words mean 'reduce pain'.*
26. **surprise** — *Both words mean 'shock'.*
27. **are** — *The words can be rearranged into the sentence 'Cassie is my best friend.'*
28. **on** — *The words can be rearranged into the sentence 'Bruno likes to chase flies.'*
29. **in** — *The words can be rearranged into the sentence 'The tiger felt queasy.'*
30. **grows** — *The words can be rearranged into the sentence 'Mum makes the best lasagne.'*
31. **pen** — *The words can be rearranged into the sentence 'I copied out the poem.'*
32. **sang** — *The words can be rearranged into the sentence 'Fion is singing out of tune.'*
33. **greengrocer** — *'Mr Apple, the greengrocer, took a bunch from a shelf behind him.'*
34. **favourite** — *'who was his favourite customer'*
35. **vegetables** — *'She bought all her fruit and vegetables from him.'*
36. **piece** — *'she usually had a piece of local gossip'*
37. **satisfaction** — *'Mrs Rhency couldn't hide her satisfaction'*
38. **admitted** — *'the shopkeeper admitted that he had heard nothing'*
39. **elegant** — *'the houses are so classy and elegant?'*
40. **atmosphere** — *'He enjoyed the dramatic atmosphere that Mrs Rhency created'*
41. **bright** — *'He's painted his whole house bright orange!'*
42. **waved** — *'Mrs Rhency paid for her items and waved to a friend'*

Shuffled Sentences

Test 9

1. the seagull swooped down and took the boy's ice-cream
2. the fisherman had caught not one but two fish
3. the shepherd had lost one of his sheep
4. the car spluttered and stopped
5. the ship-wrecked sailor swam to a tropical island
6. the intrepid explorer discovered a new continent
7. he paled at the sight of the ghost
8. the pail of water was too heavy for him to carry
9. she glanced at the mysterious stranger walking towards her
10. the table was laid ready for the meal

ASSESSMENT TEST 4

Section 1 — Rotate the Figure

1. B

The figure has been rotated 90 degrees clockwise. In option A, the arrow-style lines are positioned incorrectly and have the wrong shapes at the ends of the lines. In option C, the arrow-style lines are in front of the white circle. Option D has the wrong shapes at the ends of the lines.

2. C

The figure has been rotated 270 degrees clockwise (or 90 degrees anticlockwise). Option A is a reflection. Option B has the wrong shading. In option D, the black line is in front of the white sail shape.

3. D

The figure has been rotated 180 degrees. Option A is a reflection. Options B and C are the wrong shape.

4. A

The figure has been rotated 90 degrees clockwise. In option B, there are only three small circles (instead of four). Option C has the wrong shading. In option D, all the small circles are on the outer ring.

Section 2 — Odd One Out

1. A

All the other arrow-style lines are solid.

2. E

In all other figures, the black star has five points.

3. C

In all other figures, the shapes go from left to right in the order: raindrop, star, pentagon.

4. D

In all other figures, the cactus has one big arm and one small arm. (In D it has two big arms.)

5. D

All other figures have only one curved side. (D has two curved sides.) All other figures also have only one line of symmetry.

Section 3 — Find the Figure

Like the First Three

1. D

In all figures, the white shape must be on the end of the short line, and the black shape must be on the end of the long line.

2. C

All figures must have exactly two white triangles.

3. E

N4QDE1

4. D

All figures must have an L-shaped line with a raindrop shape attached to the end of its shortest side. There must be three short lines coming out of the raindrop shape.

5. D

All figures must have two dashed lines coming down from the top of the curved shape. The dashed lines must be attached to a four-sided shape.

Section 4 — Complete the Grid

1. D

Working from left to right, the hatching of the shape rotates 90 degrees (but the shape stays the same).

2. B

Working from left to right, the figure rotates 90 degrees clockwise, and the two shapes swap shadings.

3. B

Working from left to right, the shading of the two circles changes from white, to grey, to black. The number of short lines at the top of the figure increases by one in each grid square.

4. B

Working from left to right, the figure reflects across and gets smaller.

Section 5 — Complete the Pair

1. A

The two shapes at the top of the figure each gain a side.

2. A

The figure divides in half. The left half becomes dotted and the outline of the right half becomes dashed.

3. D

The figure rotates 180 degrees and one small white rectangle is added inside the white square.

4. B

The two arrows rotate together 90 degrees clockwise.

5. B

The top shape moves to the left and an identical shape appears on the right. The two lines rotate to join each top shape to the bottom shape.

Section 6 — Complete the Series

1. B

The series alternates between a grey orange with its stalk on the right, and a white pear with its stalk on the left.

2. C

One grey triangle is removed from the bottom of the figure in each series square.

3. B

Each shape moves clockwise around the four corners of the series square.

4. B

In each series square the three arrows rotate together 90 degrees anticlockwise. The gaps in the arrows get bigger in each series square.

5. C

A star is added in each series square. The shading of the stars alternates between white and black.

3. A

Working from left to right, the figure rotates 90 degrees clockwise. The shading of the figure changes from white, to grey, to black.

4. C

Working from left to right, the figure in the right-hand grid square is made by joining the figure in the left-hand grid square with the figure in the

Quick Lesson Recap

1) How do you work out the HCF of two numbers?

2) Work out the HCF of the following:

a) 42 and 27

3

b) 24 and 36

12

3) What is the lowest common multiple of a set of numbers?

4) Work out the LCM of the following:

a) 6 and 8

24

b) 5 and 30

5

5) $75 - 97 =$

-22

6) $(24 + 27 \div 3)^{\square} - 6^2 + 3^3 =$

24

Vocabulary 9

Exercise A

1. Disagreeable
2. Lever
3. Judgement
4. Cordial
5. Discussion
6. Comprehend
7. Excel
8. Flexible
9. Script
10. Infrequent

Exercise B

1. Flexible
2. Comprehend
3. Excel
4. Lever
5. Discussion
6. Judgement
7. Script
8. Cordial
9. Infrequent
10. Disagreeable