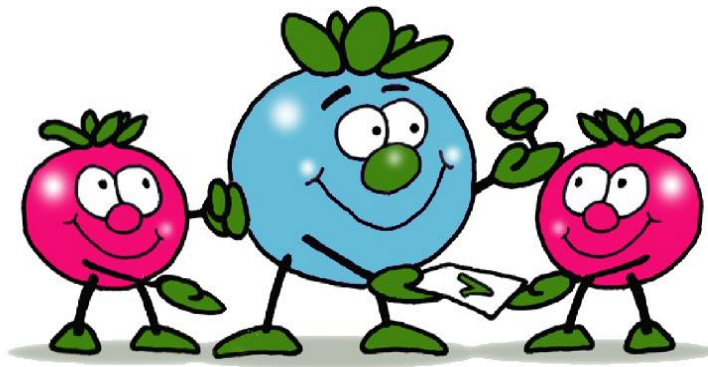


# Exam berry

## Year 5 Summer Intensive Course Homework Answers Sessions 1-10 Answers



# Session 1

## Maths Homework Answers

### Mental Maths:

- 1 65
- 2 81
- 3 152
- 4 124
- 5 40
- 6 162
- 7 83
- 8 85
- 9 21
- 10 19
- 11 11
- 12 10
- 13 39
- 14 13
- 15 19
- 16 34
- 17 -5
- 18 5
- 19 -5
- 20 -28
- 21 -59
- 22 28
- 23 -21
- 24 -1



1.  $A = 6,600$
2.  $A = 3579$
3.  $A = 8764$
4.
  - (a)  $11$
  - (b)  $7$
  - (c)  $99$
  - (d)  $8$
  - (e)  $78$
  - (f)  $22$
  - (g)  $45$
  - (h)  $9$
  - (i)  $56$
  - (j)  $13$
5.  $A = 301,303$
6.  $A = 4,958$
7.  $A = 3,926$
8.  $A = 6,352$  i.e.  $2307+4045$
9.  $A = 12, 20$  i.e.,  $12 + 20 = 32$   
 $12 \times 20 = 240$
10.  $A = 13$  i.e.,  $13+15+17$
11.  $27,000,232$
12.  $A = 380$

13. 

<b>28</b>	53	46
<b>15</b>	40	33

**25**
**18**
- i.e. 28+25; 28+18  
15+25; 15+18
14. A = 482
15. A = 5
16. A = 2,932
17. A = 82-6-8-3-2 = 63
18. A = 1230
19. A = 23,210
20. 810      (45 x 18)
21. 1610      (22+13)x46
22. x
23. £675      (£25x10=£250  
£250-£25 = £225 )
24. a. 294      (280+14)  
b. 266      (280-14)  
c. 20
25. c: 72      2nd divisor = ½ 1st  
                  2nd answer = double 1st answer
26. a. 109  
b. 314  
c. 263 r 7  
d. 102  
e. 146 r 1  
f. 248 r 5



### 3. Collective Nouns

- a. Geese                   troop / group / gaggle
- b. Bees                    gang / swarm / bunch
- c. Birds                   herd / flock / pride
- d. Fish                    host / troop/ shoal
- e. Dolphins              shoal / pod / skein

### 5. Abstract nouns

- a. Annoy - **Annoyance**
- b. Think - **Thought**
- c. Curious - **Curiosity**
- d. Born - **Birth**
- e. Thirsty - **Thirst**

### 7. Prepositions

- a. with
- b. at
- c. for
- d. towards
- e. during/before/after etc.
- f. through etc
- g. against
- h. under

### 8. Adjectives

- a. e.g. Aaron decided to go for a quick swim in the calm sea.
- b. e.g. Ethan walked through the vibrant garden on a glorious day.
- c. e.g. Tamara and Lily ran rapidly down the winding path.
- d. e.g. The teacher shouted loudly at the shocked boy.

### 9. Verbal Reasoning: Analogies

- a. Skis are to ( sledge alpine snow ) as ice skates are to ( drive ice cold )
- b. Tree is to ( grass climb trunk ) as flower is to ( stamen stalk leaf )
- c. Smile is to ( happy grin miles ) as wave is to ( waive gesticulate dance )
- d. Bank is to ( steal cheque money ) as purse is to ( wallet buy coin )
- e. Butterfly is to ( bee caterpillar air ) as cow is to ( milk calf leather )
- f. Sensation is to ( good moody feeling ) as healthy is to ( ill well sickness )
- g. Ear is to ( eye smell hear ) as nose is to ( sniff detect smell )
- h. Beet is to ( belt vegetable root ) as meet is to ( encounter met melt )
- i. Sadness is to ( joy tragedy weep ) as chilly is to ( hot freezing mild )
- j. Pip is to ( potato orange pith ) as stone is to ( tree fruit apricot )

### 10. Verbal Reasoning

- a. G
- b. T
- c. E
- d. S
- e. L
- f. M
- g. Y
- h. F
- i. K
- j. S
- k. T
- l. R
- m. H
- n. M
- o. D

### 11. Cloze Sentences

- a. ventures
- b. production
- c. preoccupied
- d. incredible
- e. birthday
- f. shattered
- g. definitely
- h. disorganised
- i. impossible
- j. mislead
- k. submarine
- l. upgrade

### 12. Plural Nouns

- a. halves
- b. mice
- c. series
- d. thieves
- e. men
- f. teeth
- g. boxes
- h. locks
- i. wives

## Session 2

# Maths Homework Answers

After you have completed the homework, go through what you have done with an adult and, if there are any mistakes, work out where you have gone wrong. You learn more from your mistakes than you do from the questions you get right.

### ***Long Division***

1. 284
2. 109
3. 102
4. 628
5. 602
6. 321 r2
7. 555 r3
8. 248 r5
9. 617 r1
10. 527 r1

### ***Highest Common Factors***

15. 9
16. 15
17. 4
18. 7
19. 6
20. 1
21. 13
22. 24
23. 12
24. 2

### ***Prime Factors***

11.  $3 \times 3 \times 7 \times 13$
12.  $2 \times 5 \times 7 \times 7$
13.  $2 \times 7 \times 17$
14.  $2 \times 2 \times 2 \times 11 \times 11$



**BIDMAS**

- 25. 15
- 26. 9
- 27. 50
- 28. 76
- 29. 16
- 30. 16
- 31. 4
- 32. 16
- 33. 4
- 34. 1

**Series**

- 35.  $6 \ 8 \frac{1}{2}$  (  $+1/2, +1, +1 \frac{1}{2}, +2, +2 \frac{1}{2}$  )
- 36. 50 98 (+3, +6, +12)
- 37. 21 28 (triangular numbers)
- 38. 43, 47 (primes)
- 39. 33 129 (+4, +8, +16 )
- 40. 48 24 (halving)
- 41. 15 10 (+1, -4 )
- 42. 81 121 (squares)
- 43. 42 63 (7x table)
- 44. 28 47 ( +9, +10, +11 )
- 45. 87 75 ( leapfrog +2 )
- 46. 216 27 (cubes )

**Rounding & Ordering Whole Numbers**

- 47. 300
- 48. 5600 ie  $70 \times 80$
- 49. 7610, 7600, 8000
- 50.  $250 + 190 - 50 = 390$  or 400 ( NB actual = 382)

**Word Problems**

- 51. 9 ( $\sqrt{49} = 7$  ;  $7 + 3^3 = 34$ ;  $34 - 25 = 9$ )
- 52. 190 metres

## Session 2

# English Homework Answers

### 1. Verbs/Adverbs

- a. e.g. beamed
- b. e.g. glared
- c. e.g. charged
- d. e.g. galloped
- e. e.g. smashed
- f. e.g. illuminated
- g. e.g. leapt
- h. e.g. slithered
- i. e.g. crashed

### 2. Verbs tenses

- a. Mary taught a class of Year 4 students
- b. Tom will catch the cricket ball in the final over
- c. Elyse saved her chocolate bar for a snack later
- d. Manny ate a lot when he was hungry
- e. Ed sang in the summer concert

### 3. Verbs and nouns

She stood beside her **horse** and looked away toward the dark **mountains**. She was daring, resourceful and used to taking care of herself, so she did not need **anyone** to tell her that she had gone **far** enough. It had been her **hope** to catch up with **Uncle Jim**. She recalled the previous **night** and his lean, pale, freckled **face**. His **eyes**, usually so soft and mild, had glinted like **steel**.

### 4. Conjunctions

- a. because/as
- b. and
- c. as/because
- d. but
- e. until

**5. Verb tenses**

- a. Jimi had left/left by the time I arrived, but hopefully I will see him soon.
- b. Richard drank copious amounts of water as he had sunbathed yesterday.
- c. Nafisa was sleeping when Mum and Dad left for work in the morning.
- d. I bought lots of burgers for the barbecue, but Tom brought the same ones.
- e. Maria swore that she had put her homework in the pile for marking.
- f. I will catch the Tube to college tomorrow , after I have been to the dentist.

**6. Identifying the subject/verb/object.**

- a. S: Mario V: Tested O: fire alarm
- b. S: Tamara V: lost O: (old) pair of shoes
- c. S: Blacksmith V: forged O: (powerful) hammer
- d. S: Explorer V: found O: (ancient) ruins

**7. Subject/Verb agreement**

- |                |         |
|----------------|---------|
| a. congregates | e. sits |
| b. think       | f. is   |
| c. comes       | g. cost |
| d. are         | h. runs |

**8. Hidden words**

- a. verb cover began
- b. seen Please enter
- c. ewer There were
- d. echo female choir
- e. rate Labrador ate
- f. wasp was past
- g. hero The robot
- h. head The advertisements
- i. beam robe amazed
- j. heat He attended
- k. here her embroidery
- l. Them/hero the money/The robber

**9. New words**

- a. Nobody
- b. Sizeable
- c. Allowed
- d. Rucksack
- e. Ashore
- f. Edition
- g. Package
- h. Indeed
- i. Sideways
- j. Belong
- k. Hasten
- l. sunshine

**10. Missing 3 letter words**

- a. handsome
- b. **W**ardrobe
- c. Carpenter
- d. Volcano
- e. Weather
- f. Squash
- g. **N**ever
- h. **C**oncert
- i. Sudden**l**y
- j. laboratory

## 11. Moving letter

- a. Gash/neither
- b. Cane/bread or beard
- c. Word/fleet
- d. Avid/rooster
- e. Sand/stick
- f. Plan/ideal
- g. Bloc/tank
- h. Hare/psalms
- i. Bear/drift
- j. Harm/face
- k. Clan/paste
- l. Aced/reach

## Session 3

### Maths Homework Answers

After you have completed the homework, go through what you have done with an adult and, if there are any mistakes, work out where you have gone wrong. You learn more from your mistakes than you do from the questions you get right.

Simplify these fractions.

1)  $\frac{1}{3}$

2)  $\frac{2}{3}$

3)  $\frac{1}{2}$

4)  $\frac{3}{11}$

5)  $\frac{3}{13}$

19) bcade

20) eacbd

21)  $\frac{3}{20}$

22)  $\frac{77}{180}$

Find the lowest common denominator for these fractions.

6) 55

7) 24

8) 42

9) 6

10) 600

23)

a.  $3\frac{2}{7}$

b.  $5\frac{3}{8}$

c.  $10\frac{4}{5}$

24)

a.  $\frac{32}{5}$

b.  $\frac{26}{9}$

c.  $\frac{47}{10}$

Addition & Subtraction Sums

11)  $\frac{9}{10}$

12)  $\frac{5}{21}$

13)  $1\frac{1}{6}$

14)  $\frac{1}{8}$

15)  $\frac{5}{8}$

16) daecb

17) ebadc

18) eadcb

25)  $\frac{5}{12}$

26)  $\frac{1}{5}$ ; 12 pupils

27) 4 : 3

### Challenge Questions

1. £120

2. £18

3. 300 employees

## Session 3

# English Homework Answers

### 1. Cloze Tests

1. manufacture
2. process
3. texture
4. glucose
5. growth
6. crucial
7. retain
8. controlled
9. immersed
10. dispatched

### 2. Poetry Comprehension

- a. d – He brushed away the fly without a thought for it.
- b. d – The fly
- c. d – It is an old fashioned word for *are*.
- d. b – Yes, he is saying that flies and men both live and die.
- e. a – Careless
- f. c – Absence
- g. c – Metaphor
- h. a – William Blake tells us that in its own way a fly is as important as a man.

### 3. Tricky Spellings

- a. colourful
- b. almighty
- c. loneliness
- d. plentiful
- e. painful
- f. careful

### 4. Parts of Speech

- a. noun
- b. adjective
- c. noun
- d. noun

- e. noun
- f. noun
- g. noun
- h. adjective

**5. Rewrite the sentences.**

- a. The museum was less interesting than we had expected.
- b. Penny encouraged her friend to walk the tightrope.
- c. Mariam knew her dad was wrong about the departure time.
- d. The doctor said I definitely needed antibiotics.
- e. The wild rabbit ate dandelions because it was hungry.

**6. Idioms**

- a. To keep silent
- b. To pour with rain
- c. To be very daring
- d. To be dead
- e. To be extremely rare
- f. To be crazy
- g. To be sneaky/very crafty

**7. Improve the sentences.**

No set answers – tutors should check these to make sure they are correct.

**8. Similes and Metaphors**

- a. simile
- b. metaphor
- c. metaphor
- d. simile
- e. simile
- f. simile
- g. metaphor



# Session 4

## Maths Homework Answers

### Homework Answers

- 1) 23.401
- 2) 23.399
- 3) 111.00
- 4) 96.24
- 5) -96.24
  
- 6) 24, 30.68
- 7) 0.2, 0.3068
- 8) 2360, 3,068
- 9) 12, 13.632
- 10) 12.9, 13.632
  
- 11) 3
- 12) 30
- 13) 30,000
- 14) 3
- 15) 3,000
  
- 16) (a) 36%  
(b) 65%
  
- 17) 32%
  
- 18) (a) 0.375  
(b) 0.75  
(c) 0.6

19) £554.40

$$462 \times 1.2 = \text{£}554.40$$

20) 15,000

$$90000 / 1.2 = \text{£} 75,000; \text{VAT} = 15,000$$

21)

- |                |     |
|----------------|-----|
| a. electricity | 5%  |
| b. servicing   | 20% |
| c. wheelchair  | 0%  |

22) £ 3,880.00

23) £ 1760

$$880 \times 2 = \text{£} 1760$$

NVR:

1. e : the black square
2. a : the octagon
3. c : the thick black square
4. d : the 4 circles
  
5. e : the plus sign
6. d : the triangle
7. b : the times sign
8. c : the plus sign
  
9. a : tear drop (right way up)
10. c : the black square
11. c : the pentagon (not inverted from the original form)
12. e: the black square

## Session 4

# English Homework Answers

## Improve Your Writing

### 1. The Journey – Creative Writing.

#### Synonyms & Antonyms:

2. a) delayed  
b) summit  
c) consent  
d) expire  
e) rude  
f) open  
g) refined  
h) combine  
i) shabby  
j) foul
  
3. a) cheery  
b) fail  
c) healthy  
d) acquire  
e) dull  
f) agree  
g) compulsory  
h) dextrous  
i) strict

# Session 5

## Maths Homework Answers

### Homework Answers

1. Isosceles triangle
2. Parallelogram
3. Straight line
4. Ellipse
5. Cuboid
  
6. 2, 2
7. 3, 3
8. 0, 2
9. 2, 2
10. 1, 1
  
11.  $60^\circ$
12.  $70^\circ$
  
13.  $192 \text{ m}^3$
14.  $9 \times 9 \text{ cm}$
15. 7 m
16.  $17 \text{ m}^2$
17. 24 cm
18. Yes, 30 cm
19. 34 cm
20.  $10 \text{ cm}^2$
21.  $1.395 \text{ m}^2$
22.  $175 \text{ cm}^2$
23.  $21 \text{ cm}^2$
  
24.  $135 \text{ cm}^2$
25.  $\frac{1}{2}$
26.  $158 \text{ m}^3$
27.  $A = ab - cd$
28.  $42 \text{ cm}^2$
29.  $20 \text{ m}^2$
30.  $0.168 \text{ m}^3$
31. 144 litres
32. Irregular hexagon

# Session 5

## English Homework Answers

### More Writing

#### Spelling Exercises

##### 2. Abstract Nouns

- a. enthusiasm
- b. maturity
- c. wisdom
- d. pride
- e. stupidity

##### 3. Which word can be made from the word in capital letters?

- |          |             |
|----------|-------------|
| a. spoil | e. severe   |
| b. canal | f. physical |
| c. order | g. blind    |
| d. coin  |             |

##### 4. Combining words

- |              |            |
|--------------|------------|
| a. downfall  | e. barrow  |
| b. insincere | f. finally |
| c. catwalk   | g. massage |
| d. armour    |            |

##### 5. Missing Two Letters

- |       |       |
|-------|-------|
| a. TE | e. FE |
| b. SH | f. IR |
| c. OT | g. TH |
| d. ME |       |

##### 6. Patterns

- |              |              |
|--------------|--------------|
| a. MS (+3-2) | d. YN (+2-5) |
| b. PV (-4+5) | e. OT (+3+5) |
| c. XE (-1+3) | f. EL (-5-1) |

## Session 6

# Maths Homework Answers

After you have completed the homework, go through what you have done with an adult and, if there are any mistakes, work out where you have gone wrong. You learn more from your mistakes than you do from the questions you get right.

### **Multiplying Brackets**

1.  $3a + 3b$
2.  $cf - cg$
3.  $na + nb^2$
4.  $ae - at + be - bt$
5.  $2c + 8 + sc + 4s$
6.  $dy - 4d - 6y + 24$

What is the value of 'k' in the following equations?

7.  $k = 9$
8.  $k = 5$
9.  $k = 2$
10.  $k = 7$
11.  $k = 3$

### **Substitutions**

12.  $a = 14$
13.  $a = 4$

### **Series:**

14. 7      12      17      22

What is the value of the 10<sup>th</sup> member of this series?

Which member of this series has a value of 37?

$$v = 2 + 5n$$

$$n = (v - 2) / 5$$

$$v = 52$$

$$n = 7$$

15. 5 11 17 23

What is the value of the 10<sup>th</sup> member of this series?  
Which member of this series has a value of 65?

$$v = 6n - 1$$

$$n = (v + 1) / 6$$

$$v = 59$$

$$n = 11$$

16. 36 33 30 27

What is the value of the 10<sup>th</sup> member of this series?  
Which member of this series has a value of 18?

$$v = 39 - 3n$$

$$n = (39 - v) / 3$$

$$v = 9$$

$$n = 7$$

### Algebra: Solving Problems

17. Shaun is 3

$$b = 3s ; b + 3 = \underline{3s + 3} = 2(s + 3) = \underline{2s + 6} \text{ so } 3s + 3 = 3$$

18.  $b = (2A)/h$

$$2A = bh$$

19.  $10x - 2xy$

$$5x - (2xy - 5x)$$

20.  $8x$

$$2(5x - 7) + 2(7 - x) ; (10x - 14) + 14 - 2x ;$$

21.  $\text{£}1.20(x + y)$

$$\text{£}1.20(x - y) + \text{£}2.40y ; \text{£}1.20x - \text{£}1.20y + \text{£}2.40y ;$$

$$\text{£}1.20x + \text{£}1.20y ;$$

22.  $3d + 3$  goals

$$d + (d - 3) + (d + 6) ; 3d + (-3 + 6) ;$$

23.  $2n + 9$

24.  $(x + y + z) / 3$

25.  $7(6m + 8n)$  or  $42m + 56n$

26.  $x = 10$  years

$$x + (x + 2) + (x + 5) = 37 ; 3x = 37 - 7 ; x = 30 \div 3 ;$$

27. 11

$$(n - 4) \cdot 8 = 56 \text{ so } 8n - 32 = 56 ; n = (56 + 32) \div 8 =$$

28.  $d = \underline{5}$  and  $\underline{\text{Gift} = \text{£}15}$

$$\text{£}13d - (d + 10) = \text{£}50 ; 12d = \text{£}50 + 10 ; d = 60 \div 12 ;$$

29.

<i>f</i>	<i>p</i>
3	66
4	84
5	102
6	120

$$P = 18f + 12$$

What is the value of *p* when *f* = 10? 192

30.

<i>s</i>	<i>p</i>
6	65
7	<b>73</b>
8	<b>81</b>
9	<b>89</b>

$$P = 8s + 17$$

# Session 6

## English Homework Answers

### 1. Missing Words (Cloze)

- a. swatting
- b. annoying
- c. appearing
- d. decline
- e. experts
- f. conservation
- g. hibernation
- h. queen
- i. peak
- j. several

### 2. Plural Forms of Words

- a. Cities
- b. Foxes
- c. Deer
- d. Butterflies
- e. Oxen

### 3. Correct/Incorrect

- a. Incorrect - ...has the...
- b. Incorrect - ...to his...
- c. Correct
- d. Incorrect - ...the most...
- e. Correct
- f. Incorrect - He turned...

### 4. Comparatives and Superlatives

- g. Funnier/funniest
- h. More childish/most childish
- i. Worse/worst
- j. Drier/driest
- k. More brilliant/most brilliant

### 5. Types of Speech

- a. Adjective
- b. Verb
- c. Adverb

d. Noun

### 6. Abstract Nouns

- a. Beauty
- b. Ambiguity
- c. Knowledge
- d. Danger
- e. Democracy
- f. Generosity
- g. Adventure
- h. Sympathy



## 7. Comprehension

- a. c – The team had not gone past the quarter-finals since 1960.
- b. Britons had experienced political turmoil in the past few years and the championship was a way to unite them.
- c. b – The championship has an interesting and complex past.
- d. a – an abbreviation
- e. Denmark, Spain and Germany
- f. The first matches only involved amateur players and were thought to have only been for entertainment.
- g. Jules Rimet
- h. d – Uruguay is not in Europe so the European teams would have to spend more money and time travelling.
- i. a – 1942 and 1946
- j. b - n
- k. A rigorous two year qualifying period
- l. England will win the world cup in 2022

## Session 7

### English Homework Test Answers

1. C Wildlife sound recording
2. A You visualise and imagine better
3. B Obsession
4. C From one place to another
5. C Oxymoron
6. C Abstract noun
7. A Relax
8. A Woman
9. A Adverb
10. C You can relive many a past moment by listening to nature recordings
  
11. Down/up
12. As, as
13. Of
14. For
15. Of
  
16. Wrong (meets)
17. Correct
18. Wrong (jackets does)
19. Wrong (is)
20. Wrong (Sarah and I)
21. Wrong (drive)
  
22. Adjective
23. Verb
24. Noun
  
25. Me
26. We
  
27. Everybody greeted President Barack Obama with great love and respect.
28. I live north of the village of Keston.
29. We ate French fries and pasta at the Italian restaurant.
30. Kate has a new Nintendo games console.
31. Joanne is the only female member of her political party.
32. Heroes

33. Cupfuls
34. Passers-by
35. Series
36. Bushes
  
37. Bridegroom / groom
38. Waiter
39. Widower
40. Landlord
  
41. "Are you sure about your decision? In that case, let's cancel our tickets to the show."
42. "Oh no! Fire! Help!"
43. Penny, my sister, is a lawyer.
  
44. Run's → runs
45. Advisable → advisable
  
46. Idea
47. Problem
48. Art, science
  
49. An
50. The
51. The
  
52. Difference
53. Convenience
54. Generosity
55. Benefit
56. Hygiene
57. Noticeable
  
58. A      Simile
59. A      An abstract noun
60. B      Enigmatic
  
61. C H E I K F A  
    S Q T X M W V N

## Session 7

# Maths Homework Answers

After you have completed the homework, go through what you have done with an adult and, if there are any mistakes, work out where you have gone wrong. You learn more from your mistakes than you do from the questions you get right.

### **Averages**

1. £1,560
2. £670
3. £1,162.50
4. £2,895 (£3,565 - £670)
5. 7

### **Data Handling**

6. Monkey
7. 192
8. 96
9. rhino
10. Hippo
  
11. Grey
12. 2 hours
13. 3 hours
14. 3.2 hours
15. Windy
16. 2 hours
- 17.
  
18. week 6
19. 17 hours
20. Weeks 3, 7 and 10 (15 hours)
21.  $15 - 10 = 5$  hours
22.  $12 - 4 = 8$  hours
23. Total number of hours of TV watched =  $9 + 11 + 15 + 10 + 12 + 4 + 15 + 17 + 9 + 15 = 117$   
Average no. of hours of TV watched =  $117 / 10 = 11.7$  hours

## Units and Conversions

1. litres
2. miles
3. millimetres
4. tons
5. grams
6. £200
7. Sunday
8. 3.5kg
9. 480 miles
10. 10 kg
11. Gained £50

EXAM BERRY EXAM BERRY

EXAM BERRY

EXAM BERRY

# Session 7

## NVR Homework Test Answers

### Section 1

1. E Flip horizontally, centre goes black
2. C Right doubles horizontally, left goes inside right, becomes bold
3. D 90° rotation of outer, outer goes black, inner right shaded
4. B right fits into left
5. D colour reversal
6. C shaded figures gone others bigger, shading goes to other figures with two black dots replacing squares.
7. A loses shading and gets a larger dashed copy outside
8. D inverted and dashed then larger version outside with black dot bottom

### Section 2

1. C rotates 90° clockwise and shading alternates
2. B rotating 90° clockwise
3. D 1 more circle, 1 more line each side
4. C figure and squares rotate 45° clockwise
5. D 45° rotation every other step, B/W alternates and arrows increasing every other step
6. D triangle rotates 90°; square alternates, dash moves across L to R
7. B Triangle inverts and outlines swap; box alternates opposite corners
8. C Arches alternate fine and heavy, new inner appears every other step; triangle pattern alternates

### Section 3

1. C Arrow pointing anticlockwise
2. B the pentagon is repeated, no circle
3. C inner is not duplicate of the outer
4. D the others are mirror images, d is a rotation and no line of symmetry between them
5. A 2 of the symbols are the same
6. C inner shapes not equal to number of sides

7. D number of dots should indicate which set of lines is reversed
8. B figure is divided into 4 equal segments

## Section 4

1. B JSP 1<sup>st</sup> is right colour, 2<sup>nd</sup> is flip, 3<sup>rd</sup> is left colour
2. E PSW 1<sup>st</sup> is notch, 2<sup>nd</sup> is label, 3<sup>rd</sup> is left reel
3. C BMJ 1<sup>st</sup>/2<sup>nd</sup> are ball/tree flip, 2<sup>rd</sup> must be shade height. As 3<sup>rd</sup> is J, first must be B so first is the ball and 2<sup>nd</sup> the tree flip.
4. D RD 1<sup>st</sup> is inner shading 2<sup>nd</sup> is shape
5. C MJ 1<sup>st</sup> is roof shading, 2<sup>nd</sup> is shading below, not R or K so must be J
6. A KE 1<sup>st</sup> is lower element, 2<sup>nd</sup> is upper pattern
7. E GZ 1<sup>st</sup> is contents, 2<sup>nd</sup> is orientation
8. D QI 1<sup>st</sup> is dots, 2<sup>nd</sup> is lines, pattern doesn't count

## Section 5

1. E top to bottom, swap shading- big gets lowest, top gets big, lowest gets top
2. B columns give number, rows give vertical position
3. A L to R all figures rotate 90° anticlockwise
4. C L to R top and bottom horizontal flip while centre rectangle rotates 90°
5. E top to bottom is a vertical flip
6. C ball position is on a left diagonals, arrow direction on right diagonals
7. B L to R 90° clockwise
8. D L to R square same place, right diagonals, lines same place

# Session 8

## English Homework Test Answers

### Verbal reasoning

- |               |                   |
|---------------|-------------------|
| 1. They       | 21. D then        |
| 2. Her        | 22. N             |
| 3. We         | 23. C snails      |
| 4. You        | 24. B business    |
| 5. His        | 25. A likes       |
|               | 26. Weigh         |
| 6. prey       | 27. Where         |
| 7. corps      | 28. You've        |
| 8. toad       | 29. Tiger         |
| 9. creak      | 30. Necessary     |
| 10. knows     |                   |
| 11. caw       | 31. B (verb)      |
| 12. pray      | 32. A (noun)      |
| 13. towed     | 33. D (adverb)    |
| 14. creek     | 34. E (Pronoun)   |
| 15. nose      | 35. C (adjective) |
|               | 36. D             |
|               | 37. A             |
| 16. Sweetness | 38. F             |
| 17. Taste     | 39. E             |
| 18. Pride     | 40. B             |
| 19. Vanity    | 41. C             |
| 20. Colour    |                   |



42. Henry

43. On, I

44. We

45. Russia, Canada

46. The, Buckingham, Palace

**Comprehension**

47. A grim one, “dreary” is the only applicable adjective.

48. Winter

49. Trying to bring it to life with electricity

50. Noun disaster

51. He feels that he is horrendously ugly

52. 2 years

53. He can’t bear the sight of the creature

54. He runs away again, this time downstairs to the courtyard

55. Adverb

56. He is disgusted and disappointed by it

57. Adjective dreary

58. 6 am

59. He was afraid of seeing the creature again

60. DHFACBJ

61. SWVQPMXN

# Session 8

## Maths Homework Test Answers

- |       |                               |       |  |
|-------|-------------------------------|-------|--|
| 1. c  | £202.50                       | 26. d | 25 minutes   |
| 2. d  | 7 and 13                      | 27. b | 6  |
| 3. e  | 0.345                         | 28. a | 18.5cm   |
| 4. c  | 34.5                          | 29. a | 72.5°  |
| 5. e  | 160ml                         | 30. b | £3780  |
| 6. d  | 1/2                           | 31. c | 6y   |
| 7. e  | £70                           | 32. d | 1:8  |
| 8. e  | 3 <sup>5</sup> / <sub>6</sub> | 33. b | 30   |
| 9. a  | 8.5kg                         | 34. c | metres   |
| 10. c | 44                            | 35. d | <sup>2</sup> / <sub>10</sub> , <sup>3</sup> / <sub>9</sub> , 40%, <sup>2</sup> / <sub>3</sub> , 0.75 |
| 11. d | 350                           | 36. c | 72   |
| 12. d | 400m                          | 37. d | 4096   |
| 13. d | 1/3                           | 38. e | 34   |
| 14. b | Cylinder                      | 39. e | 90   |
| 15. e | 1/3                           | 40. d | 12 + 0   |
| 16. e | South west                    | 41. a | 30°  |
| 17. e | N                             | 42. c | £16  |
| 18. d | 12.5%                         | 43. d | 0.0035 kg  |
| 19. e | 1/8                           | 44. b | u = 4t   |
| 20. c | 20%                           | 45. c | 20   |
| 21. a | 11:09                         | 46. a | 6.25 m <sup>2</sup>  |
| 22. b | 40°                           | 47. e | 7  |
| 23. a | 1                             | 48. d | 2113   |
| 24. c | 40cm                          | 49. d | 120  |
| 25. a | 3cm                           | 50. e | 2/5  |

# Session 9

## CEM Homework Paper Answers

### PAPER A

#### SECTION 1

1. can
2. build
3. pen
4. friendly
5. smell
6. flexible
7. guest
8. balloon
9. approach
10. blossom
11. consonant
12. victory
13. vest
14. replacement
15. change
16. assist
17. begged
18. vital
19. expedition
20. gather
21. imitate
22. authentic
23. intelligent
24. anxious
25. fiction
26. frightened
27. ready

28. quiet
29. moistureless
30. common
31. meaningless
32. plump
33. ignorant
34. fine
35. sterile
36. straightened
37. conceal
38. initiate
39. liberate
40. discourage

#### SECTION 2

1. 15
2. 54
3. 211
4. 20
5. 16
6. A
7. 315 m<sup>2</sup>
8. 50%
9. 98,723
10. 135°
11. 18°C
12. 16°C
13. 15°C

14. 36
15. 3
16. 2
17. 32
18. 216
19. 34
20. 487.5 litres

### SECTION 3

1. c – both
2. a - Scotland
3. b - initial
4. b – air waves
5. c – it took around 130 years
6. b - verb
7. b – very different to
8. c – rows of crops
9. d – for electrical into light energy
10. a – Paul Nipkow
11. c – A new idea randomly came to him
12. c - unrefined
13. b – from 1800-1900
14. a - approximately

## PAPER B

### SECTION 1

1. a) 126
1. b) 4120
2. c
3. 183
4. 30
5. 72 cm
6. 24
7. 15 cm

### SECTION 2

1. False
2. 25
3. 0.2
4. 32%
5. 108
6. False
7. £1176
8. 100
9. a
10. €4

### SECTION 3

1. d - capacity
2. a - reality
3. b - agility
4. c - dumbfounded
5. g - urgent
6. l - aid

- |                    |   |
|--------------------|---|
| 7. e - however     | 6. B – don't cross, mirror image                  |
| 8. h - evacuated   | 7. B – no arrow                                   |
| 9. f - receding    | 8. C – rotate with N                              |
| 10. l - pastime    | 9. C – colour and door position                   |
| 11. k - popularity | 10. B – horizontal oval at base. lines point left |
| 12. j - concern    | 11. B   |
| 13. m - antics     | 12. C   |
| 14. ANC            | 13. B   |
| 15. TIS            | 14. E   |
| 16. ECT            | 15. B   |
| 17. OOK            | 16. B (RD)  |
| 18. EAL            | 17. D (CD)  |
| 19. brilliance     |   |
| 20. ambiguity      |   |
| 21. thickness      |   |
| 22. warmth         |   |
| 23. monotony       |   |
| 24. criminal       |   |
| 25. reference      |   |
| 26. foretell       |   |
| 27. camera         |   |
| 28. coverage       |   |
| 29. meagre         |   |
| 30. possession     |   |

#### SECTION 4

1. B – not alphabetical
2. C – 2 the same, no straight lines
3. D – arc not big enough
4. E – even number of lines
5. D – mirror image

# Session 10

## Maths Homework Test Answers

- |  |                     |
|--|---------------------|
| 51. 1 and 3                                  | 76. 2000 litres     |
| 52. 75%                                      | 77. 16              |
| 53. 20                                       | 78. 8               |
| 54. 100 kg                                   | 79. 324 candles     |
| 55. 12:28 pm                                 | 80. 45              |
| 56. 1 and $\frac{8}{9}$                      | 81. 3.125           |
| 57. 4cm by 2cm                               | 82. 0.9 metres      |
| 58. £1000                                    | 83. 1360 kg         |
| 59. 427                                      | 84. $\frac{21}{26}$ |
| 60. 1000m/min                                | 85. 9               |
| 61. 85                                       | 86. 12              |
| 62. 25%                                      | 87. £675.50         |
| 63. $x=6$                                    | 88. 85,000          |
| 64. £4.74                                    | 89. 9               |
| 65. £49                                      | 90. 3 bags          |
| 66. 110                                      | 91. $\frac{4}{9}$   |
| 67. $\frac{9}{14}$                           | 92. 2               |
| 68. 8 and $\frac{3}{7}$                      | 93. -117            |
| 69. 2.64 km                                  | 94. £240,000        |
| 70. No                                       | 95. TV3             |
| 71. Slow train from Epsom saves 5<br>minutes | 96. 1 gram          |
| 72. 1  | 97. (-1,5)          |
| 73. 10 weeks                                 | 98. 2:9             |
| 74. 9.4                                      | 99. 26              |
| 75. 12:15 pm                                 | 100. Isosceles      |

# Session 10

## English Homework Test Answers

### Correct Pronouns

1. It
2. Me
3. You
4. He
5. I

### Homophones

6. Grate
7. Ring
8. Poor
9. Knight
10. Yoke
11. Wring
12. Yolk
13. Night
14. Great
15. pour

### Abstract nouns

16. clarity
17. construction
18. heat
19. transparency
20. brevity

### Mistakes

21. A – bought
22. N
23. D – menace
24. A – it's
25. C – restaurants

### Suitable words

26. It's
27. Sneeze
28. We've
29. Darkness
30. Courage

### Parts of speech

31. E (pronoun)
32. C (adjective)
33. B (verb)
34. D (adverb)
35. A (noun)

### Idioms

36. A – hit the road
37. E – Off one's rocker
38. C – A bitter pill to swallow
39. D – Under the weather
40. B – Kick the bucket
41. F – From A to Z

### Capital Letters

42. The, Puccini
43. If
44. Tomorrow, I'm, Inverness
45. Jane, Austen, Emma
46. They, Salamanca, Spain
47. Gina, Tracy, Beaker
48. Mrs, Wilbur, Post, Office
49. Diego, Maradona
50. Buckingham, Palace, Sandringham, Queen's

**Gap fill**

51. D C E B G J A H I (list, jungle, important, surround, weeks, scientific, collected, mechete, refuge)

**Comprehension**

52. D – The routine surrounding Matilda’s visit to her Great-Aunt Willoughby  
 53. C – Matilda had no choice but the endure Mrs Pridmore’s harsh treatment  
 54. C – Matilda felt that Mrs Pridmore could be difficult  
 55. B – The adults held all the power  
 56. A – miserable  
 57. B - her leg got caught in the button-hook  
 58. D – the author  
 59. C – insolent  
 60. D – Each visit followed the same tedious pattern  
 61. B – Matilda was ‘taken on the omnibus to Streatham’.

**Gap fill**

62. J K B I D F (sat, found, attic, received, returned, tidy)  
 X Q S P U O V (folded, some, command, stopped, lack, window, still)

**Missing word**

63. ACE – peaceful  
 64. DEN – prudent  
 65. RID – abridged  
 66. TUB – stubborn  
 67. TEN – intensive  
 68. PAT – osteopath  
 69. MAT – legitimate

**Forming words**

70. Thin  
 71. Mall  
 72. Camp  
 73. Sort  
 74. Nude  
 75. Isle