



BROAD HORIZON
— T U I T I O N —

11+ Tuition

Year 5

Week 10 – Lesson

ANSWERS

Contents

Starter Task – Quick Revision.....	3
Starter task – Vocabulary Homework Test	4
Maths	5
Negative Numbers.....	5
Practice – Long Maths Word Problems	7
Practice – Quick Maths Questions.....	9
English – Comprehension	10
Comprehension Practice	10
Verbal Reasoning	11
Verbal Reasoning Tests.....	11
Mixed Verbal Reasoning Questions with Comprehension	15
Vocabulary.....	18
Non-Verbal Reasoning.....	19
Quick Lesson Recap.....	20
Homework – Vocabulary to memorise.....	21
Anagrams	22
Related Words	23
Rhyming Synonyms.....	25

Starter Task – Quick Revision

- 1) Add 35ml to 11L, give your answer in litres. **11035ml/11.035L**

- 2) Simplify the ratio 96:36 **8:3**

- 3) Work out the volume of a cuboid with a length of 5cm, a width of 3cm and a height of 2.5cm. **37.5cm³**

- 4) Two angles on a straight line are 37 and 29 degrees, what is the third missing angle? **114°**

- 5) Two angles in a triangle add up to 126 degrees, what is the third missing angle? **54°**

- 6) Tom bakes 4 cakes for 32 guests, how many cakes are needed for 64 guests? **8 cakes**

- 7) Convert $\frac{13}{25}$ into a percentage **52%**

- 8) Convert $\frac{17}{20}$ into a percentage **85%**

- 9) Convert $\frac{8}{32}$ into a percentage **25%**

- 10)) Convert $\frac{19}{25}$ into a percentage **76%**

Starter task – Vocabulary Homework Test

Exercise C

1. Complacent
2. Evoke
3. Sensible
4. Flimsy
5. Adverse
6. Negligible
7. Overpower
8. Precarious
9. Ensuing
10. Ample

Maths

Negative Numbers

1. Calculate the following:

a. $4 - 5 = -1$

b. $2 + (-6) = -4$

c. $10 - 12 = -2$

d. $-10 + 2 = -8$

e. $-4 + 3 = -1$

f. $-7 + 11 = 4$

g. $-4 + (-8) = -12$

h. $-2 + 3 = 1$

i. $-2 - 8 = -10$

j. $10 - (-9) = 19$

k. $-2 - (-16) = -2 + 16 = 14$

l. $7 - (-4) = 7 + 4 = 11$

m. $11 - 20 = -9$

n. $43 - 56 = -13$

o. $-21 + (-15) = -36$

2. Calculate the following:

a. $4 \times -2 = -8$

b. $-11 \times 12 = -132$

c. $10 \times -8 = -80$

d. $-18 \div -3 = 6$

e. $-56 \div 7 = -8$

f. $-64 \div -4 = 16$

g. $-9 \times -12 = 108$

h. $24 \times -6 = -144$

i. $-120 \div 4 = -30$

j. $685 \div -5 = -137$

k. $-7 \times -13 = 91$ (this one stays the same, since two negatives make positive)

l. $12 \div -0.5 = -24$

m. $-1 \div -2 = 0.5$

n. $-146 \times 6 = -876$

o. $-254 \times -8 = 2032$

p. $(-12)^2 = 144$

q. $(-8)^2 = 64$

r. $(-3)^3 = -27$

Practice – Long Maths Word Problems

Test 19 — pages 63-65**1. B**

Convert to ml then find the largest number.

1.3 litres = 1300 ml, and 0.62 litres = 620 ml.

So the largest value is 1600 ml.

2. 630 $1000 - 370 = 630$ did not say they enjoyed swimming.**3. 74%** $1000 - 260 = 740$ did not say they go swimmingregularly. $\frac{740}{1000}$ is the same as $\frac{74}{100}$ which is the same as 74%.**4. E**Oliver has $2 \times 32 = 64$ sweets in total. $\frac{1}{8}$ of 64 is $64 \div 8 = 8$ sweets.**5. 545** $8 \times 7 = 56$, so $80 \times 7 = 560$. 15 sockets don't work, sothe total number of working sockets is $560 - 15 = 545$.**6. 130 m**The perimeter is $45 + 20 + 45 + 20 = 130$ m.**7. 900 m²**Area of parallelogram = base \times height, so area of thesecond playing field is 45×20 . $45 \times 2 = 90$, so $45 \times 20 = 900$ m².**8. 7200**

1 call is received every second, so 60 calls are received

every minute. There are 60 minutes in an hour.

 $6 \times 6 = 36$, so $60 \times 60 = 3600$ calls per hour.In two hours, $2 \times 3600 = 7200$ calls are received.**9. B**

Round 4.8 up to 5 and 365 up to 400.

 4.8×365 is about $5 \times 400 = 2000$ days old.

1753 days is the closest option.

10. D

There are 360° around a point. The roundabout has

swung 60% of the way around, so there is

 $100 - 60 = 40\%$ left. 10% of 360 is $360 \div 10 = 36^\circ$,so there are $36 \times 4 = 144^\circ$ left (use partitioning here).**11. 71**

Tara's number increases by 1 less each time. Her second

number is 8 larger than 41, her third is 7 larger than

49 and her fourth is 6 larger than 56, giving 62. So her

fifth number will be 5 larger than 62, giving $62 + 5 = 67$,

and her sixth number will be 4 larger than 67, giving

 $67 + 4 = 71$.**12. E**

Subtract £1.50 from £3.50 to get the amount

of Nina's fare that depended on distance travelled.

 $3.50 - 1.50 = £2.00$. It costs 50p per km, and there

are 4 lots of 50p in £2, so she travelled 4 km.

Test 20 — pages 66-68**1. D**

There are $70 - 20 = 50$ home shirts, so $\frac{50}{70}$ of the football shirts are home shirts, which is the same as $\frac{5}{7}$.

2. A

$4 \times 9 = 36$, so the line of tables is $4 \times 90 = 360$ cm long, which is the same as 3.6 m.

3. 420 m

You're rounding to the nearest 10, so look at the units. There's a 5 in the units, so round up.

4. 27 cm³

$3 \times 3 \times 3 = 9 \times 3 = 27$ cm³.

5. 390 minutes

Brian spends $65 \times 6 = 60 \times 6 + 5 \times 6 = 360 + 30 = 390$ minutes on his art project.

6. 2 hours, 5 minutes

The big hand is pointing at *N* (= 4), so it's twenty-past the hour. The little hand is just after *X* (= 10), so it's twenty-past ten. 10:20 is 2 hours and five minutes way from 12:25.

7. 81 litres

1 litre of squash makes $8 + 1 = 9$ litres of drink, so 9 litres of squash makes $9 \times 9 = 81$ litres.

8. B

The highest positions in the league are lowest on the vertical axis, so it looks like the team were highest in the league when they had done the least amount of training. They were actually lowest in the league when they had done the least amount of training and higher when they had done more training.

9. C

Work backwards through Becky's steps. $21 + 2 = 23$. Doubling 23 gives 46. Subtract 3 from 46 to get her original number, 43.

10. B

Two bunches feeds 6 monkeys, so 1 bunch feeds 3 monkeys. To feed 15 monkeys, the zoo needs $15 \div 3 = 5$ bunches of bananas.

11. £10.50

The two tickets come to $9 + 5 = £14$. 75% is the same as $\frac{3}{4}$, so first work out $\frac{1}{4}$ of £14. This is $14 \div 4 = £3.50$. Now subtract from £14 to get $14 - 3.5 = £10.50$.

12. D

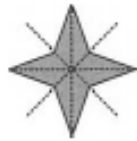
If £75 000 is 75% of the total ticket sales, then the total ticket sales is £100 000. The cost of *a* adult tickets is $9a$, and the cost of *c* children's tickets is $5c$, so these must add to give £100 000. So the formula is $9a + 5c = 100\ 000$.

Practice – Quick Maths Questions

Test 10 — pages 32-34

1. D

There are 4 lines of symmetry as shown:



2. 24 cm²

Area of a triangle = $\frac{1}{2} \times \text{base} \times \text{height}$
 $= \frac{1}{2} \times 8 \times 6 = 4 \times 6 = 24 \text{ cm}^2$.

3. D

$97p = £0.97$. $£1.35 + £0.97 = 1.35 + 1 - 0.03$
 $= 2.35 - 0.03 = £2.32$.

4. 0.71

In order from smallest to largest, the values are:
 $0.07, 0.71, 0.74, 0.77, 1.07, 1.71$. So 0.71 is second.

5. E

The angles around a point add up to 360° .
 The given angles add up to $110 + 90 + 70 + 40$
 $= 200 + 110 = 310^\circ$. So $r = 360 - 310 = 50^\circ$.

6. 11 mm

The total of the 6 lengths = $12 + 5 + 7 + 13 + 25 + 4$
 $= 66$ mm. So the mean = $66 \div 6 = 11$ mm.

7. 6

There are 2 symbols for brown eyes and $\frac{1}{2}$ a symbol for grey eyes, so there are $1\frac{1}{2}$ more symbols for brown than grey. Each symbol represents 4 students, so $1\frac{1}{2} \times 4 = 4 + 2 = 6$ more students have brown eyes.

8. 1355

Add on 212 to get from -212 to 0. Then there is
 $1567 - 212 = 1355$ remaining to add on above 0
 (use column subtraction).

9. D

$\frac{29}{12} = \frac{24+5}{12} = \frac{24}{12} + \frac{5}{12} = 2\frac{5}{12}$.

10. 1169

167 is 1.67×100 , and 7 is $70 \div 10$.
 So $167 \times 7 = 1169 \times 100 \div 10 = 1169 \times 10 = 1169$.

11. 76.5

10% of 90 = $90 \div 10 = 9$. 5% of 90 = $9 \div 2 = 4.5$.
 $85\% \text{ of } 90 = (8 \times 9) + 4.5 = 72 + 4.5 = 76.5$.

12. E

1 inch = 2.54 cm, so 10 inches = $2.54 \times 10 = 25.4$ cm.
 $40 \text{ inches} = 25.4 \times 4 = (25 \times 4) + (0.4 \times 4)$
 $= 100 + 1.6 = 101.6$ cm.

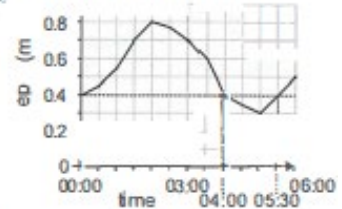
13. 2200 g

$2 \text{ kg} = 2 \times 1000 = 2000 \text{ g}$. $\frac{1}{5} \text{ kg} = 1000 \div 5 = 200 \text{ g}$.
 So $2\frac{1}{5} \text{ kg} = 2000 + 200 = 2200 \text{ g}$.

14. B

Each square on the horizontal axis is worth 3 hours + 6 = 0.5 hours = 30 minutes.

Draw a line across from 0.4 m on the vertical axis to find the time when the river first goes below 0.4 m and when it rises above 0.4 m again:



The difference between

04:00 and 05:30 is 1 h 30 minutes = $1\frac{1}{2}$ hours.

15. 162 cm

10% of 135 = $135 \div 10 = 13.5$ cm.
 $20\% \text{ of } 135 = 13.5 \times 2 = 27$ cm.
 Add this on to the original height: $135 + 27 = 162$ cm.

16. C

Multiplying y by 3 gives $3y$, then adding 7 gives $3y + 7$.

17. 22

The angle for pear is $\frac{40}{180} = \frac{(40+20)}{(180+20)} = \frac{2}{9}$ of the angle for apple. So the number of people who said pear must be equal to $\frac{2}{9}$ of the 99 people who said apple.
 $\frac{1}{9}$ of 99 = $99 \div 9 = 11$. So $\frac{2}{9}$ of 99 = $11 \times 2 = 22$.

18. 32

The 56th term is $(\frac{1}{2} \times 56) + 4 = (56 \div 2) + 4$
 $= 28 + 4 = 32$.

19. B

Area of a rectangle is length \times width = $3s \times t = 3st$

20. A

The number of fruit sweets is $\frac{2}{5}$ of the number of toffees.
 $\frac{1}{5}$ of 215 = $215 \div 5 = (200 \div 5) + (15 \div 5) = 40 + 3 = 43$.
 $\frac{2}{5}$ of 215 = $43 \times 2 = 86$ fruit sweets.
 So in total there are $215 + 86 = 301$ sweets.

21. D

The translation of point K from $(2, -6)$ to $(4, -4)$ is 2 right and 2 up. Translating point L $(1, -3)$ 2 right and 2 up moves it to coordinates $(1 + 2, -3 + 2) = (3, -1)$.

22. 28 m

Total area = 36 m^2 , so area of one triangle = $36 \div 3 = 12 \text{ m}^2$.
 Area of one triangle = $\frac{1}{2} \times \text{base} \times \text{height} = \frac{1}{2} \times \text{base} \times 4 = \text{base} \times 2$. Base $\times 2 = 12$, so base = $12 \div 2 = 6$ m.
 The perimeter of the trapezium is made up of 3 sides of length 6 m, and 2 sides of length 5 m.
 So perimeter = $(3 \times 6) + (2 \times 5) = 18 + 10 = 28$ m.

English – Comprehension

Comprehension Practice

Test 6 - How the Rhinoceros Got His Skin

Question	Answer	Source of Answer
1	C	Knowledge of vocabulary required. The word 'uninhabited' means without inhabitants. An antonym is a word that means the opposite of another word. Therefore, the option here that is the best antonym for 'uninhabited' is 'populated'.
2	E	Refer to lines 2-3: '...with nothing but his hat and his knife and a cooking-stove...'
3	D	Reader's personal judgement required. Refer to the description of the cake in lines 4-8 to help form an opinion as to what about it was peculiar. The only thing that stands out as strange is its size, being 'two feet across and three feet thick' (lines 5-6), which is too large for a normal cake.
4	D	Knowledge of literary techniques required. This phrase is descriptive. A descriptive phrase is one that assigns qualities to the object or person being described.
5	E	Reader's logical inference required. Refer to lines 14-16 to make a decision as to why the Man left the cake. As he climbed to the top of a tree, it is most likely that he was scared of the Rhinoceros and fled to safety.
6	B	Reader's personal judgement required. Refer to lines 17-18 to help form an opinion as to how the Rhinoceros might have felt. As he 'spiked that cake on the horn of his nose' (line 17) and 'went away, waving his tail' (line 18), it is most likely that he felt 'unapologetic' and 'smug'.
7	E	Knowledge of vocabulary required. The word 'recited' means repeated from memory. A synonym is a word that means the same, or nearly the same, as another word. Therefore, the option here that is the best synonym for 'recited' is 'performed'.
8	C	Knowledge of vocabulary required. The word 'dreadful' means extremely bad or serious.
9	E	Knowledge of literary techniques required. The song is best characterised as rhyming. A rhyming song or poem is one that is composed in rhyme so that certain lines end in corresponding sounds.
10	B	Reader's personal judgement required. Refer to the song in lines 23-25 to help form an opinion as to its main message. As the song is referring to the Rhinoceros: 'Whosoever takes a cake...' (line 23), the only likely option is option 'b': 'The Rhinoceros would regret his actions.'
11	A	Reader's logical inference required. Refer to the sentence '...the Man...found the skin, and he smiled one smile that ran all round his face two times.' (lines 35-36) to make a decision as to how the Man felt. From the description of his large smile, it is most likely that he felt ecstatic.
12	A	Reader's logical inference required. Refer to the phrase '(but he rubbed the buttons off)' in line 50 to make a decision as to why the Rhinoceros could not get rid of the cake-crumbs. As he had rubbed the buttons off his skin, he could no longer take it off, leaving the crumbs trapped inside.
13	A	Refer to lines 54-55: '...every rhinoceros has great folds in his skin and a very bad temper, all on account of the cake-crumbs inside.'
14	C	Reader's personal judgement required. As it is not true that rhinoceroses have cake-crumbs trapped inside their skins, this story is fictional or invented.
15	B	Knowledge of grammar required. Proper nouns, i.e. nouns that are specific or unique, are always capitalised. In this story, 'Man' and 'Rhinoceros' are acting as names for these characters and are therefore proper nouns. This means that they should be capitalised.

Verbal Reasoning

Verbal Reasoning Tests

Paper 3 (pages 9–13)

- 1–5 Category A contains words to do with trees
(**pine, willow, oak**)
Category B contains words to do with food
(**broccoli, beans, noodles**)
Category C contains words to do with birds
(**parrot, eagle, wren, robin**)
- 6 **clever, dull** The other three words are synonyms meaning 'concept' or 'belief'..
- 7 **divide, subtract** The other three words are concerned with linking items or people.
- 8 **nearby, neighbouring** The other three words are adjectives describing something faraway.
- 9 **lively, sad** The other three words are concerned with the application of power.
- 10 **lie, complaint** The other three words are concerned with suggestion.
- 11 **s** moss, salt
- 12 **p** jump, plum
- 13 **d** glad, deck
- 14 **o** solo, onion
- 15 **k** wink, knit
- 16–20 Refer to Paper 2 Questions 32–36 on how to answer this type of question.
- 16 **food, healthy, body**
- 17 **giraffe, leaves, highest**
- 18 **stand, tree**
- 19 **midnight, rainy, night**
- 20 **asked, mother, computer**
- 21 **guilty, innocent** 'Guilty' is most opposite to 'innocent' because 'guilty' means responsible for an act whereas 'innocent' means not responsible.
- 22 **slow, swift** 'Slow' is the most opposite to 'swift' because 'slow' means not fast whereas 'swift' means fast.
- 23 **joy, sorrow** 'Joy' is the most opposite to 'sorrow' because 'joy' means happiness whereas 'sorrow' means unhappiness.
- 24 **hazard, safety** 'Hazard' is the most opposite to 'safety' because a 'hazard' is a threat to safety whereas 'safety' is freedom from danger.
- 25 **accurate, wrong** 'Accurate' is the most opposite to 'wrong' because 'accurate' means correct whereas 'wrong' means incorrect.
- 26 **daughter** 'Mother' and 'father' are parents in the same way as 'daughter' and 'son' are offspring.
- 27 **twelve** A 'century' is a period of a hundred years, so refers to the number 'hundred', as 'dozen' refers to 'twelve'.
- 28 **mine** The word 'mind' becomes 'mine' by changing the last letter from 'd' to 'e' in the same way as 'find' becomes 'fine'.
- 29 **herd** 'Flock' is a collective noun for 'sheep' in the same way as 'herd' is a collective noun for 'cows'.
- 30 **Monday** 'January' is preceded by 'December' in the same way as 'Tuesday' is preceded by 'Monday'.
- 31 **life** lifeboat, lifebuoy, lifeguard, lifejacket
- 32 **stop** stopgap, stopover, stopwatch, stoppage
- 33 **fire** fireguard, firefighter, firefly, firepower
- 34 **wood** woodwork, woodland, woodpecker, woodworm

- 35 **back** backache, backstroke, backward, backdate
- 36 **freeze** 'Ice', 'chill' and 'freeze' are all words associated with extreme cold; 'freeze' can also mean to 'stop' or come to a 'standstill'.
- 37 **side** A 'team' or 'gang' is often referred to as a 'side'; an 'edge' or 'margin' is often called a 'side'.
- 38 **dull** 'Dull' can mean 'boring' or 'uninteresting'; 'dull' can also mean 'gloomy' or 'cloudy'.
- 39 **present** 'Present' can mean 'here' or 'attending'; a 'present' is another word for a 'gift' or 'donation'.
- 40 **track** 'Track' can mean to 'find' or 'hunt'; a 'track' is also a 'path' or 'trail'.
- 41–43 A table is the easiest way to sort the information, like this:

	Sandwiches	Pear	Apple	Yogurt	Drink	Snack bar
Thomas	✓			✓	✓	
Kasim	✓		✓		✓	✓
Charlotte	✓			✓	✓	
Elena	✓	✓		✓	X	

- 41 **2**
- 42 **Thomas and Charlotte**
- 43 **Kasim**
- 44–47 Give two marks for each correct crossword.

44–45

N		S		A	
E	X	T	E	N	D
S		A		G	
T	I	M	B	E	R
E		P		R	
D	I	S	U	S	E

46–47

	A		P		M
I	N	S	I	D	E
	T		L		S
F	L	O	O	D	S
	E		T		E
P	R	I	S	E	D

- 48–52 Place the letters of the word below or above the symbols to make coding and decoding easier:

<	£	>	/	?	\$
S	E	N	I	B	L

- 48 **SENSE**
- 49 **LINE**
- 50 **LESS**
- 51 **? / > <**
- 52 **? \$ / < <**
- 53–57 Refer to Paper 1 Questions 50–54 on how to complete this type of question.
- 53 **25, 33** Each number in the sequence increases by 4 (17, 21, 25, 29, 33, 37)
- 54 **9, 25** There are two sequences which alternate. In the first sequence, starting with 15, the numbers increase by 5 each time (15, 20, 25). In the second sequence, starting with 9, the numbers increase by 9 each time (9, 18, 27).
- 55 **6, 3** Each number in the sequence is divided by 2 (96, 48, 24, 12, 6, 3)
- 56 **44, 32** Each number in the sequence decreases by 3 (47, 44, 41, 38, 35, 32)
- 57 **44, 69** The number added increases by 1 each time: +9, +10, +11, +12 etc. (14, 23, 33, 44, 56, 69)
- 58–59 Arrange the words in a grid to make it easier to put them in alphabetical order.

m	o	b	i	l	e	
m	o	d	e	l		
m	o	d	e	m		
m	o	d	e	r	n	
m	o	n	s	t	e	r
m	o	u	l	d		

- 58 **model**
- 59 **mould**
- 60 **mobile**
- 61–65 Refer to Paper 1 Questions 71–75 on how to answer this type of question.
- 61 **hold** Sometimes I wash old golf balls then resell them.
- 62 **nest** Some of the buses went on but mine stopped at the corner.
- 63 **wear** We are going to paint your room this weekend.
- 64 **them** The missing cat eventually came home.
- 65 **neat** Everyone at my office begins at nine.
- 66–67 **TREE, BOTTOM**
- 68 **RAIN**
- 69–70 **LIGHT, NINE**
- 71 **preen** There is only one 'e' in DESCRIPTION.
- 72 **dream** There is no 'm' in BREAKDOWN.
- 73 **grass** There is only one 's' in PLASTERING.
- 74 **nasty** There is no 'y' in BANNISTER.
- 75 **honest** There is no 'n' in SILHOUETTE.
- 76 **ANT PLANTS**
- 77 **TEN SENTENCES**

A5

- 78 **OUT MOUTH**
- 79 **BAT BATTERY**
- 80 **PEN SHARPEN**

Paper 4 (pages 13–18)

- 1–5 Refer to Paper 1 Questions 16–20 on how to complete this type of question.
 - 1 **cardboard**
 - 2 **myself**
 - 3 **nothing**
 - 4 **buttercup**
 - 5 **rugby**
 - 6 **PIERCE**
 - 7 **FINE**
 - 8 **ONCE**
 - 9 **LOOSE**
 - 10 **MEAN**
- 11 **spade** 'Spade' is a card suit, as is a 'club' and 'diamond'; a 'spade' is also a garden tool, as are 'hoes' and 'rakes'.
- 12 **ring** A 'ring' is an item of jewellery, as is a 'bracelet' and 'necklace'; to give someone a 'ring' can also mean to 'telephone' someone or give them a 'bell'.
- 13 **cast** 'Cast' means to 'toss' or 'throw'; 'cast' is also a word for a group of 'actors' or 'players'.
- 14 **comfortable** 'Comfortable' means 'cosy' or 'at ease'; 'comfortable' can also mean 'well-off' or 'wealthy'.
- 15 **discount** To 'discount' can mean to 'decrease' or 'reduce'; 'discount' can also mean to disregard something, as in 'ignore' or consider 'unimportant'.
- 16 **trainer, sock** The other three words are all concerned with ways of moving.
- 17 **hot, spicy** The other three words are all ways of cooking using heat.
- 18 **idea, drawing** The other three words all mean to make ready before a specific event.
- 19 **cat, goat** The other three words are all the young of animals or birds.
- 20 **brown, grass** The other three words are all types of fruit.
- 21–23 A table is the easiest way to sort the information, like this:

	Departure	Time taken	Arrival
Alice	7.15	1h 30m	8.45
Grace	7.30	45m (half of 1h 30m)	8.15
Lucy	7.45	20m	8.05

- 21 **8.45 am**
- 22 **8.15 am**
- 23 **8.05 am**

- 24–28 Refer to Paper 1 Questions 50–54 on how to complete this type of question.
 - 24 **19, 21** Each number in the sequence increases by 2 (17, 19, 21, 23, 25, 27)
 - 25 **22, 16** There are two sequences which alternate. In the first sequence, starting with 11, the numbers increase by 11 each time (11, 22, 33). In the second sequence, starting with 14, the numbers increase by 2 each time (14, 16, 18).
 - 26 **3, 18** The sequence is +1, +2, +3, +4 etc. (3, 4, 6, 9, 13, 18)
 - 27 **27, 29** The sequence is +3, +2, +3, +2 etc. (19, 22, 24, 27, 29, 32)
 - 28 **2, 10** There are two sequences which alternate. The first sequence increases by 1 each time (2, 3, 4). The second sequence is increases by 5 each time (5, 10, 15).
- 29 **ILL FILLED**
- 30 **HAD SHADE**
- 31 **AND SANDY**
- 32 **DEN SUDDENLY**
- 33 **ELF SHELF**
- 34 **true, false** 'True' is most opposite to 'false' because 'true' means consistent with fact whereas 'false' means inconsistent with fact.
- 35 **rear, front** 'Rear' is most opposite to 'front' because 'rear' means the point furthest from the front, whereas 'front' means the point furthest from the rear.
- 36 **cheeky, polite** 'Cheeky' is the most opposite to 'polite' because 'cheeky' means impertinent and showing poor manners whereas 'polite' means showing good manners.
- 37 **allow, deny** 'Allow' is the most opposite to 'deny' because 'allow' means to give permission whereas 'deny' means to refuse permission.
- 38 **total, partial** 'Total' is the most opposite to 'partial' because 'total' means the entirety whereas 'partial' means just a part, rather than the entirety.
- 39 **k** luck, kiss
- 40 **b** bulb, bell
- 41 **w** grow, wasp
- 42 **k** folk, kerb
- 43 **t** oat, trace
- 44–46 For this type of question you can only judge what must be true based on the given information. Some options may be true, but the answer must refer to the statements given.
 - 44 **Goldfish breathe underwater.** From the two statements given, it must be true that 'Goldfish breathe underwater' as goldfish are fish and fish breathe underwater.

- 45 **Bees make sweet honey.** From the two statements given, it must be true that 'Bees make sweet honey' as bees make honey and honey tastes sweet.
- 46 **Leather shoes are waterproof.** From the two statements given, it must be true that 'Leather shoes are waterproof' as some shoes are made from leather and leather is waterproof.

47–50 Give two marks for each correct crossword.

47–48

C		T		B	
H	O	R	D	E	S
E		Y		T	
E	X	I	S	T	S
K		N		E	
Y	O	G	U	R	T

49–50

G		S		R	
L	I	T	T	E	R
I		R		C	
D	R	A	W	E	R
E		I		D	
S	U	N	S	E	T

- 51 **IS** Each letter in the first pair moves forward by one place in the following pair.
- 52 **OU** The first letter in the first pair moves forward by two places in the following pair; the second letter moves back by two places.
- 53 **QMT** The first and third letters in the first set move forward by one place in the following set; the second letter moves back by one place.
- 54 **UW** Each letter in the first pair moves forward by three places in the following pair.
- 55 **SWP** Each letter in the first set moves back by one place in the following set.
- 56–60 Arrange the words in a grid to make it easier to put them in alphabetical order.

k	n	e	a	d		
k	n	e	e	c	a	p
k	n	e	e	i	n	g
k	n	i	c	k		
k	n	i	g	h	t	

- 56 **kneeing**
 57 **knick**
 58 **knight**

- 59 **knead**
 60 **kneecap**
 61–65 Place the letters of the word below or above the symbols to make coding and decoding easier:

C	O	M	P	U	T	E	R	S
?	&	\$	*	!	£	@	>	<

- 61 **STORE**
 62 **MOST**
 63 **COURSE**
 64 **£ @ > \$**
 65 **? ! £ @**
 66 **NAME, MEAN**
 67 **SNAP, PANS**
 68 **MILES, SLIME**
 69 **MARCH, CHARM**
 70 **SHAPE, PHASE**
 71 Dad drives us to school in the car.
 72 She had cut her knee badly.
 73 I have to sit and wait.
 74 Mum knows we were planning to trick her.
 75 We went to the bank to get some cash.
 76 **22** 5 + 2 + 3 + 6 + 2 + 4
 77 **12** 5 + 2 + 1 + 4
 78 **20** 6 + 5 + 2 + 1 + 6
 79 **21** 3 + 6 + 1 + 5 + 2 + 4
 80 **13** 4 + 2 + 2 + 5

Paper 5 (pages 18–22)

- 1 **doze**
 2 **tied**
 3 **spot**
 4 **bond**
 5 **peasant**
 6–10 Refer to Paper 2 Questions 47–51 on completing this type of question.
 6 **hit, success** Both words are synonyms of 'accomplishment' or 'triumph'.
 7 **complication, problem** Both words mean a situation that 'frustrates' or 'causes difficulty'.
 8 **price, fee** Both words mean the 'cost' for an item or service provided.
 9 **imagine, suppose** Both words are synonyms of 'assume' or 'believe to be'.
 10 **proof, evidence** Both words mean a 'fact' or 'set of facts, helpful in forming a conclusion or judgement'.
 11–15 Refer to Paper 2 Questions 27–31 on how to complete this type of question.
 11 **38** Multiply the two numbers outside the brackets and add 2: $12 \times 3 = 36$, $36 + 2 = 38$
 12 **2** Divide the left-hand number by the right-hand number: $24 \div 12 = 2$

Mixed Verbal Reasoning Questions with Comprehension

Test 14 — pages 49-52

1. C

Lines 3-4 state that Harry "manifested a remarkable distaste for study". This shows that he didn't like study.

2. A

In line 4, Harry's parent is described as "weak and ignorant and so didn't stop him spending time on 'petty' things".

3. C

Lines 6-7 state that Harry "was left an orphan and almost a beggar." This suggests that Harry had been relying on his parent for financial help.

4. B

Lines 7-8 state "For all active and industrious pursuits, Harry was unfitted alike by nature and training." "active and industrious pursuits" is another way of saying "hard work" and "unfitted" means "unsuited". Therefore, Harry was not well-suited to the world of work.

5. B

Line 15 states "A fortunate chance and some influence" got Harry the job of private secretary.

6. D

Lines 18-19 states that the reason Sir Thomas received the diamond "had been often whispered and repeatedly denied". Whispering about something and denying information are indicators that something is being kept a secret.

7. B

Lines 21-22 state that the diamond transformed Sir Thomas "into one of the lions of London society." The reference to lions is a metaphor for an important person because lions are considered to be powerful.

8. weekend

The words can be rearranged into the sentence "She read the whole book in two days."

9. tweet

The words can be rearranged into the sentence "The bird was singing whilst perched on a branch."

10. twenty

The words can be rearranged into the sentence "Get him travelled hundreds of miles to see the exhibition."

11. visiting

The words can be rearranged into the sentence "I am thinking of going on holiday to Australia."

12. switched

The words can be rearranged into the sentence "Remember to turn the lights off when you leave home."

13. will

The words can be rearranged into the sentence "Rina sketched an outline of a house in pencil."

14. sun

The words can be rearranged into the sentence "Thanks to the good weather, there was an influx of tourists."

15. pinnacle

Both words mean 'peak'.

16. deplorable

Both words mean 'unsatisfactory'.

Test 16 — pages 58-60

1. introduced

'food rationing was **introduced**'

2. restricted

'the amount of food families could receive was **restricted**.'

3. Although

'**Although** rationing may sound cruel'

4. ensure

'to **ensure** that everyone had enough food'

5. imported

'much of Britain's food was **imported**'

6. decline

'a **decline** in the amount of food'

7. scarce

'as supplies became **scarce**'

8. wealthy

'only **wealthy** people'

9. afford

'would have been able to **afford** to eat well'

10. Initially

'**Initially**, rationing only'

11. few

applied to a **few** products'

12. progressed

'as the war **progressed**'

13. redundant

'necessary' means 'essential' whereas
'redundant' means 'not required'.

14. exhaustive

'incomplete' means 'unfinished' whereas
'exhaustive' means 'complete'.

15. despondent

'cheerful' means 'happy' whereas
'despondent' means 'unhappy'.

16. prudent

'unwise' means 'foolish' whereas 'prudent' means 'wise'.

17. apprehension

'confidence' means 'self-assurance' whereas
'apprehension' means 'anxiety'.

18. adult

The words can be rearranged into the sentence
'It won't be long before you're all grown up.'

19. next

The words can be rearranged into the sentence 'I
suppose we will have to wait until tomorrow.'

20. will

The words can be rearranged into the sentence
'It would be unfair if we didn't invite him.'

In each question below, the words can be rearranged to form a sentence. One word doesn't fit in the sentence. Underline the word that doesn't fit.

Example: red the has ride girl bicycle a

18. before it adult grown long all be you're won't up
19. wait next have we until suppose to I will tomorrow
20. invite unfair it we him will if be would didn't
21. their towards set beach they on off walk the to long down

Three of the words in each list are linked. Mark the word that is not related to these three.

Example: journal diary textbook notebook

22. glove shoe slipper sock
23. lights bauble holly tinsel
24. recover cure treat operate
25. department division company section
26. guitar string wind brass

END OF TEST

/26

Vocabulary

Test 1 — pages 2-4

1. yew

'yew' makes sense here — it is a type of tree, whereas 'ewe' is a female sheep.

2. missed

'missed' makes sense here — it is the past tense of the verb 'to miss', whereas 'mist' means fog.

3. foul

'foul' makes sense here — it means 'disgusting', whereas 'fowl' is the word for birds used for food.

4. boars

'boars' makes sense here — it is the word that refers to wild pigs, whereas 'boors' means 'rude people' and 'bores' means 'to make someone feel uninterested'.

5. scene

'scene' makes sense here — it is the word for part of a play whereas 'seen' is from the verb 'to see'.

6. meddle

'meddle' makes sense here — it is the word that means 'to interfere', whereas 'medal' means 'a disc given as a prize'.

7. obtain

Both words mean 'get'.

8. intimidate

Both words mean 'bully'.

9. undesirable

Both words mean 'unwanted'.

10. apprehension

Both words mean 'fear'.

11. restore

Both words mean 're-establish'.

12. appropriate

Both words mean 'acceptable'.

13. credible

'implausible' can mean 'unbelievable', whereas 'credible' means 'believable'.

14. displease

'gratify' means 'to please', whereas 'displease' means 'to dissatisfy'.

15. inability

'capability' means 'ability', whereas 'inability' means 'lack of ability'.

16. granted

'withheld' means 'held back', whereas 'granted' means 'gave'.

17. unemotional

'expressive' means 'showing emotion', whereas 'unemotional' means 'not showing emotion'.

18. praise

'disparage' means 'to belittle', whereas 'praise' means 'to show admiration'.

19. INK

The complete word is SINKING.

20. LIE

The complete word is RELIEVED.

21. RAP

The complete word is SCRAPED.

22. RAT

The complete word is CRATES.

23. EAR

The complete word is SEARCH.

24. ARK

The complete word is MARKING.

25. ATE

The complete word is GREATER.

Non-Verbal Reasoning

Paper 2

Section 1

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

Section 2

- 13 C
- 14 E
- 15 A
- 16 E
- 17 D
- 18 C
- 19 D
- 20 D
- 21 A
- 22 E
- 23 C
- 24 E

Section 3

- 25 B
- 26 C
- 27 E
- 28 B
- 29 C
- 30 E
- 31 B
- 32 B
- 33 E
- 34 A
- 35 D
- 36 C

Section 4

- 37 C
- 38 B
- 39 C
- 40 A
- 41 E
- 42 A
- 43 C
- 44 D
- 45 A
- 46 A
- 47 C
- 48 C

Section 5

- 49 B
- 50 A
- 51 B
- 52 E
- 53 C
- 54 A
- 55 E
- 56 B
- 57 C
- 58 D
- 59 A
- 60 E

Total 60 marks

Quick Lesson Recap

- 1) Mark can bake 4 cakes in 1 hour, how many cakes can he bake in 2 hours 30 mins?

10

- 2) A quadrilateral has a length of 13cm and a width of 7cm.

- a. What is the area?

91cm²

- b. What is the perimeter?

40cm

- 3) A quadrilateral has a length of 6.5cm and a width of 3cm.

- a. What is the area?

19.5cm²

- b. What is the perimeter?

19cm

- 4) A call centre can take 1 phone call every 2 seconds, how many phone calls can they take in 2 hours?

3600

5) $\frac{3}{7} + \frac{2}{21} = \frac{11}{21}$

6) $\frac{7}{9} - \frac{10}{18} = \frac{4}{18}$

7) $\frac{5}{9} + \frac{10}{36} = \frac{30}{36}$

8) $\frac{3}{8} - \frac{3}{16} = \frac{3}{16}$

10

Homework – Vocabulary to memorise

Vocabulary 10

Exercise A

1. Devious
2. Commitment
3. Popular
4. Episode
5. Neglect
6. Enlighten
7. Fiasco
8. Naval
9. Elusive
10. Pedigree

Exercise B

1. Fiasco
2. Devious
3. Popular
4. Pedigree
5. Commitment
6. Neglect
7. Naval
8. Enlighten
9. Elusive
10. Episode

Anagrams

Test 10

1. p The parcel was left in the porch.
2. h There are thrilling rollercoasters at the theme park.
3. m We are going on a school trip to a museum tomorrow.
4. t My new trainers are comfortable and smart.
5. e There was a beautiful sunset this evening.
6. u You will need sturdy boots for our outing.
7. l There are many reasons why I don't want you travelling alone.
8. g I don't think tigers should be kept in cages.
9. c We sat on a bench to eat our picnic.
10. e Sunglasses protect my eyes from the glare of the sun.

Related Words

Test 10

1 verbal

Solution: In the top row of the grid, the last three letters of the first word begin the second word, and the last three letters of the second word begin the third word. This pattern is repeated in the bottom row.

2 take

Solution: The prefixes in the top row of the grid can be joined to any of the three words in the bottom row of the grid to form new words ('mislay', 'overlay', 'relay', 'mistake', 'overtake', 'retake', 'misuse', 'overuse', 'reuse').

3 pat

Solution: In the top row, the third letter of the first word is removed to make the second word, and the third letter of the second word is removed to make the third word. This pattern is repeated in the bottom row.

4 nation

Solution: The words in the top row of the grid can be joined to the words directly below to form the name of a flower (e.g. 'car' + 'nation' = 'carnation').

5 front

Solution: The words in the top row of the grid are all synonyms. Each word in the bottom row rhymes with the word directly above (e.g. 'grunt' rhymes with 'front').

6 November

Solution: The months in the top row of the grid all have 31 days, whereas the months in the bottom row all have 30 days.

7 reluctantly

Solution: The words in the top row of the grid are all adverbs that rhyme with one another. Each word in the bottom row is the antonym of the word directly above (e.g. 'gladly' and 'reluctantly' are antonyms).

8 ludicrous

Solution: The words in the top row of the grid are synonyms of each other. Likewise, the words in the bottom row are all synonyms of each other (e.g. 'bizarre', 'ludicrous' and 'outlandish' are synonyms).

9 cousin

Solution: The words in the top row of the grid are male members of the family. The words below them are their female counterparts. The word 'cousin' is the same for both male and female.

10 tail

Solution: The words in the top row of the grid can all be joined to the words in the bottom row to form compound nouns ('pony' and 'tail' = 'ponytail').

Rhyming Synonyms

Test 10

1. **E** **arrogant**
naughty → haughty → arrogant
2. **B** **varying**
punctuating → fluctuating → varying
3. **E** **whimsical**
perusal → unusual → whimsical
4. **E** **partisan**
resided → one-sided → partisan
5. **A** **imply**
evacuate → insinuate → imply
6. **E** **basic**
incremental → fundamental → basic
7. **B** **gathering**
disintegration → congregation → gathering
8. **B** **obstacle**
sediment → impediment → obstacle
9. **D** **deceptive**
conceding → misleading → deceptive
10. **E** **scant**
brittle → little → scant