



Year 5

Summer Term

Practice

ENGLISH

First name: _____

Last name: _____

This paper contains 45 marks

- a. This paper consists of a 30 minute test.**
- b. Read the instructions carefully.**
- c. Do not begin the test or open the booklet until told to do so.**
- d. Work as quickly and as carefully as you can.**



ENGLISH
(30 minutes)

Comprehension: Read this passage carefully, then answer the questions that follow. Text adapted from The Time Machine by HG Wells, which is in the public domain.

- 1 In another moment we were standing face to face, I and this fragile thing out of
futurity. He came straight up to me and laughed into my eyes. The absence
from his bearing of any sign of fear struck me at once. Then he turned to the
5 two others who were following him and spoke to them in a strange and very
sweet and liquid tongue.

- There were others coming, and presently a little group of perhaps eight or ten of
these exquisite creatures were about me. One of them addressed me. It came
into my head, oddly enough, that my voice was too harsh and deep for them. So
I shook my head, and, pointing to my ears, shook it again. He came a step
10 forward, hesitated, and then touched my hand. Then I felt other soft little
tentacles upon my back and shoulders. They wanted to make sure I was real.
There was nothing in this at all alarming. Indeed, there was something in these
pretty little people that inspired confidence—a graceful gentleness, a certain
childlike ease. And besides, they looked so frail that I could fancy myself flinging
15 the whole dozen of them about like nine-pins. But I made a sudden motion to
warn them when I saw their little pink hands feeling at the Time Machine.
Happily then, when it was not too late, I thought of a danger I had hitherto
forgotten, and reaching over the bars of the machine I unscrewed the little
levers that would set it in motion, and put these in my pocket. Then I turned
20 again to see what I could do in the way of communication.

- And then, looking more nearly into their features, I saw some further
peculiarities in their Dresden-china type of prettiness. Their hair, which was
uniformly curly, came to a sharp end at the neck and cheek; there was not the
faintest suggestion of it on the face, and their ears were singularly minute. The
25 mouths were small, with bright red, rather thin lips, and the little chins ran to a
point. The eyes were large and mild; and—this may seem egotism on my part—
I fancied even that there was a certain lack of the interest I might have expected
in them.

- As they made no effort to communicate with me, but simply stood round me
30 smiling and speaking in soft cooing notes to each other, I began the
conversation. I pointed to the Time Machine and to myself. Then hesitating for a
moment how to express time, I pointed to the sun. At once a quaintly pretty little
figure in chequered purple and white followed my gesture, and then astonished
me by imitating the sound of thunder.

- 35 For a moment I was staggered, though the import of his gesture was plain
enough. The question had come into my mind abruptly: were these creatures
fools? You may hardly understand how it took me. You see I had always
anticipated that the people of the year Eight Hundred and Two Thousand odd

would be incredibly in front of us in knowledge, art, everything. Then one of
40 them suddenly asked me a question that showed him to be on the intellectual
level of one of our five-year-old children—asked me, in fact, if I had come from
the sun in a thunderstorm! It let loose the judgment I had suspended upon their
clothes, their frail light limbs, and fragile features. A flow of disappointment
rushed across my mind. For a moment I felt that I had built the Time Machine in
45 vain.

I nodded, pointed to the sun, and gave them such a vivid rendering of a
thunderclap as startled them. They all withdrew a pace or so and bowed. Then
came one laughing towards me, carrying a chain of beautiful flowers altogether
new to me, and put it about my neck. The idea was received with melodious
50 applause; and presently they were all running to and fro for flowers, and
laughingly flinging them upon me until I was almost smothered with blossom.
You who have never seen the like can scarcely imagine what delicate and
wonderful flowers countless years of culture had created. Then someone
suggested that their plaything should be exhibited in the nearest building, and
55 so I was led past the sphinx of white marble, which had seemed to watch me all
the while with a smile at my astonishment, towards a vast grey edifice of fretted
stone. As I went with them the memory of my confident anticipations of a
profoundly grave and intellectual posterity came, with irresistible merriment, to
my mind.

60 The building had a huge entry, and was altogether of colossal dimensions. I was
naturally most occupied with the growing crowd of little people, and with the big
open portals that yawned before me shadowy and mysterious. My general
impression of the world I saw over their heads was a tangled waste of beautiful
bushes and flowers, a long neglected and yet weedless garden. I saw a number
65 of tall spikes of strange white flowers, measuring a foot perhaps across the
spread of the waxen petals. They grew scattered, as if wild, among the
variegated shrubs, but, as I say, I did not examine them closely at this time. The
Time Machine was left deserted on the turf among the rhododendrons.

1. What was the narrator standing face to face with in the first paragraph?

It was ...

- A** the time machine.
- B** a creature from the future.
- C** his future self.
- D** his horoscope.
- E** his friend.

2. What immediately struck the narrator about this thing?

- A** How much it looked like him.
- B** How scared it was.
- C** How green it was.
- D** How strong it looked.
- E** How it was not scared at all.

3. What does “a strange and very sweet and liquid tongue” (lines 4-5) mean?

It means...

- A** its tongue looked really odd.
- B** it spoke in an unusual but pleasant language.
- C** it spoke English.
- D** it was chewing sweets.
- E** it was giving sweets to its friends.

4. Why did the narrator point to his ears?

Because...

- A** his ears looked like theirs.
- B** he was worried his voice might hurt their ears.
- C** he wanted their earmuffs.
- D** he couldn't hear what they were saying.
- E** he couldn't understand what they were saying.

5. Why did the creatures start touching the narrator?

Because....

- A** they were attacking him.
- B** they wanted to stop him from moving.
- C** they wanted him to follow them.
- D** they wanted his clothes.
- E** they wanted to make sure he was real.

6. Which of these words in line 13 is an adjective?

- A** people
- B** graceful
- C** inspired
- D** confidence
- E** that

7. Why was the narrator not alarmed by the touching?

Because....

- A** he knew he was physically stronger than them.
- B** they had told him not to be concerned.
- C** he was confident his friends would rescue him.
- D** he had a plan to escape.
- E** he had not been tied up.

8. However, what was the narrator worried about in lines 15-20?

He was worried that....

- A** the creatures might be armed.
- B** the creatures would have some dangerous friends.
- C** the creatures might never let him go.
- D** the creatures might send the Time Machine in motion.
- E** the creatures would take all his food.

9. Which of these words in line 18 is a preposition?

- A forgotten
- B reaching
- C unscrewed
- D little
- E over

10. Which of these words in line 24 is an adverb?

- A faintest.
- B suggestion.
- C singularly.
- D were.
- E minute.

11. What did the narrator think “may seem egotism on my part”?

That...

- A he wasn't scared.
- B he was so interested in them.
- C their features were attractive like him.
- D their eyes seemed not that interested in him.
- E their eyes were so big.

12. Why did the narrator point to the sun?

Because...

- A he wanted to show them he was thirsty.
- B he wanted to indicate time.
- C he wanted them to tell him the time.
- D he was warning them of the danger of the sun.
- E he was showing them that was where he came from.

13. How did the creature in purple and white react to the narrator pointing to the sun?

It....

- A made a noise like thunder.
- B had a face like thunder.
- C looked really excited.
- D cowered in fear.
- E immediately followed a path to the sun.

14. Why was the narrator so surprised by this reaction?

He was surprised because....

- A they understood him.
- B he realised they lived on the sun.
- C he realised they had arrived on a thunderstorm.
- D he realised they actually spoke his language.
- E he thought they would be more intelligent than that.

15. Why did he think that he had built the Time Machine in vain?

Because...

- A he would never be able to leave.
- B it was now broken.
- C it was just down to his ego.
- D he couldn't see the point if creatures of the future were not more intelligent.
- E it hadn't actually worked as a Time Machine.

16. What startled the creatures?

They were startled by...

- A an actual clap of thunder.
- B the Time Machine.
- C the narrator being armed.
- D the narrator's impersonation of thunder.
- E the narrator speaking.

17. There is an adjective in line 48. Which word is it?

- A came
- B chain
- C prevent
- D me
- E beautiful

18. Why was the narrator “smothered in blossom”? (line 51)

- A Because the creatures were covering him with them.
- B Because the Time Machine was entangled in it.
- C Because he had brought them as a peace offering.
- D It is impossible to tell.
- E Because the creatures used blossom as a potion.

19. Why was the narrator “led past the sphinx of white marble”? (line 55)

- A Because the Time Machine had been accidentally activated.
- B Because he wanted to show the creatures the Time Machine.
- C Because the creatures wanted to see the Time Machine.
- D Because the creatures wanted to lock him up.
- E Because the creatures wanted to show him off.

20. “I and this fragile thing” (line 1). In this context, what type of word is fragile?

- A adverb.
- B verb.
- C common noun.
- D adjective.
- E proper noun.

21. “into my head, oddly enough” (line 8). In this context, what type of word is oddly?

- A adverb.
- B verb.
- C common noun.
- D adjective.
- E proper noun.

22. “these exquisite creatures” (line 7). Which word is most similar in meaning to exquisite?

- A tiny.
- B magnificent.
- C huge.
- D ugly.
- E equal.

23. “came one laughing towards me ” (line 48). In this context, what type of word is towards?

- A proper noun.
- B adverb.
- C verb.
- D adjective.
- E preposition.

24. “can scarcely imagine” (line 52). In this context, which word is closest in meaning to scarcely?

- A often
- B surely
- C fairly
- D barely
- E hopefully

25. "... with irresistible merriment ..." (line 58). In this context, which word is closest in meaning to **irresistible**?

A irrepressible.

B obvious.

C slight.

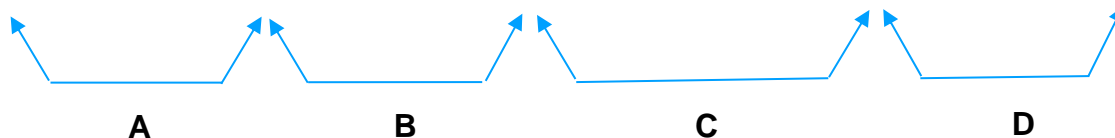
D actual.

E functional

English – SPELLING

In the sentence there is either one spelling mistake (within A-D) or no mistakes at all (answer N). Mark your answers on the answer sheet provided.

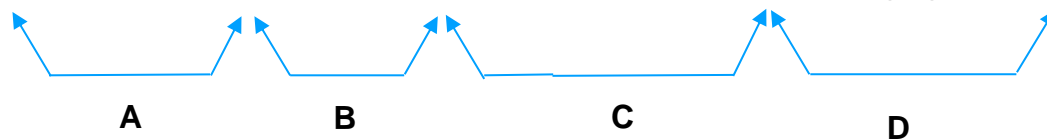
- 26.** The climbers, quite beleaguered by the whether, were delighted to be back home.



- 27.** It's preposterous to think that you can be a success without revising.



- 28.** It is remarkable to think that the orchestra did so well with such brief preparation.



- 29.** Could we attempt to reach the top of the mountain before the sun dissappears?



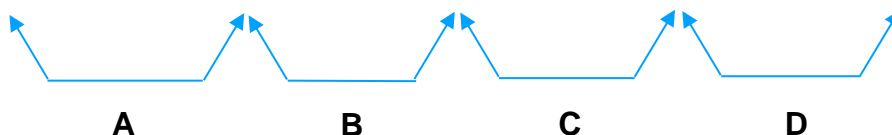
- 30.** The teacher said we were plumbing the depths with our poor behaviour.



English – PUNCTUATION

In the sentence there is either one punctuation mistake (within A-D) or no mistakes at all (answer N). Mark your answers on the answer sheet provided.

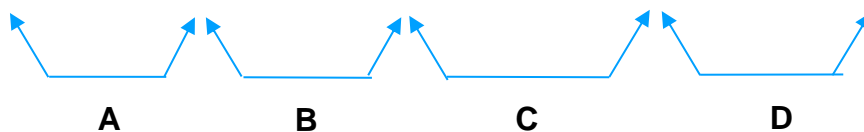
- 31.** It wasn't possible to make our way across the field as it was flooded



- 32.** How many times will we be told to concentrate during assembly.



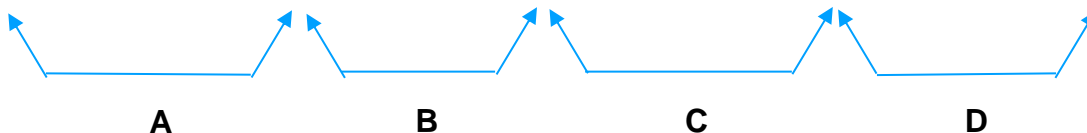
- 33.** The robot was programmed to use it's own arms for easy tasks.



- 34.** Where in the world, regardless of distance, would you most like to visit?



- 35.** "This didn't used to be here," exclaimed Wayne. "it has been put there just now!"



English: In these questions you have to unjumble the sentence. One word doesn't belong in the sentence - work out which one. All of the other words must be used in the sentence. You should choose one of the five answers and mark its letter on the answer sheet below.

36. communicate use birds toys sounds to each other with

communicate	birds	toys	sounds	other
A	B	C	D	E

37. dance floor whizzed couple the around the feeling

dance	whizzed	couple	around	feeling
A	B	C	D	E

38. tent lashed rain the down up on

tent	lashed	rain	down	up
A	B	C	D	E

39. allowed phones homework not are my at school

allowed	phones	homework	at	school
A	B	C	D	E

40. before exams too nervous feel it's normal to

exams	too	nervous	normal	to
A	B	C	D	E

English – GRAMMAR

*In the sentence choose the option A-E that will give the most grammatically correct answer.
Mark your answers on the answer sheet provided.*

41. The fired gun

A	removed	B	recoiled	C	remarked	D	revoked	E	reserved
----------	---------	----------	----------	----------	----------	----------	---------	----------	----------

against his shoulder.

42. We're

A	ensured	B	lovely	C	ecstatic	D	excused	E	embellished
----------	---------	----------	--------	----------	----------	----------	---------	----------	-------------

that our team is winning the match.

43. She wrote

A	frantically	B	frenzied	C	famed	D	febrile	E	footer
----------	-------------	----------	----------	----------	-------	----------	---------	----------	--------

as she was running out of time.

44. What

A	excelling	B	extreme	C	excusing	D	examined	E	exercise
----------	-----------	----------	---------	----------	----------	----------	----------	----------	----------

weather we had to face out there!

45. She

A	accelerated	B	excelled	C	accepted	D	accent	E	accurately
----------	-------------	----------	----------	----------	----------	----------	--------	----------	------------

that she had been wrong.

END OF TEST



Year 5

Summer Term

Practice

VERBAL

First name: _____

Last name: _____

This paper contains 34 marks

- a. This paper consists of a 20 minute test.**
- b. Read the instructions carefully.**
- c. Do not begin the test or open the booklet until told to do so.**
- d. Work as quickly and as carefully as you can.**



VERBAL REASONING PRACTICE

In the following sets of five words, find the two words that are different from the rest.

1.

A	unforeseen	B	unexpected	C	queer	D	serendipitous	E	outlandish
----------	------------	----------	------------	----------	-------	----------	---------------	----------	------------

2.

A	hyacinth	B	macaw	C	foxglove	D	raccoon	E	orchid
----------	----------	----------	-------	----------	----------	----------	---------	----------	--------

3.

A	seal	B	beetle	C	otter	D	iguana	E	bear
----------	------	----------	--------	----------	-------	----------	--------	----------	------

4.

A	keyboard	B	programmer	C	mouse	D	typing	E	monitor
----------	----------	----------	------------	----------	-------	----------	--------	----------	---------

5.

A	realm	B	superior	C	empire	D	royalty	E	kingdom
----------	-------	----------	----------	----------	--------	----------	---------	----------	---------

6.

A	pilot	B	soar	C	aviate	D	plane	E	fly
----------	-------	----------	------	----------	--------	----------	-------	----------	-----

7.

A	ornament	B	trinket	C	keepsake	D	mantlepiece	E	decorate
----------	----------	----------	---------	----------	----------	----------	-------------	----------	----------

8.

A	nest	B	hog	C	sty	D	burrow	E	hamster
----------	------	----------	-----	----------	-----	----------	--------	----------	---------

In the following questions, the letters stand for numbers. Work out the answer to each sum as a letter.

9. If $A = 5$, $B = 8$, $C = 6$, $D = 7$, $E = 9$

What is the answer to this sum as a letter?

$$(B \times E) \div C - D = ?$$

A	B	C	D	E
---	---	---	---	---

10. If $A = 6$, $B = 30$, $C = 12$, $D = 5$, $E = 4$

What is the answer to this sum as a letter?

$$B \div D \times A = ?$$

A	B	C	D	E
---	---	---	---	---

11. If $A = 4$, $B = 5$, $C = 3$, $D = 18$, $E = 24$

What is the answer to this sum as a letter?

$$(A \times D) \div C = ?$$

A	B	C	D	E
---	---	---	---	---

12. If $A = 12$, $B = 48$, $C = 8$, $D = 2$, $E = 6$

What is the answer to this sum as a letter?

$$B \div A + E - D = ?$$

A	B	C	D	E
---	---	---	---	---

13. If $A = 108$, $B = 2$, $C = 121$, $D = 3$, $E = 6$

What is the answer to this sum as a letter?

$$D \times D \times E \times B = ?$$

A	B	C	D	E
---	---	---	---	---

Rearrange the letters in capitals to make the word that completes the sentence correctly. Follow the example to answer the questions, then write the word on the line provided.

14. **OPTUL** is recognized as a dwarf planet.

15. Liam wanted to **ANGEREARR** his furniture in his bedroom.

16. **DILESCROCO** have sharp teeth and are very dangerous.

17. It is important to understand the signs of **MITISENING**.

18. I was late for my appointment so I **IEDMLYETAIM** left the house.

19. Many people will vote for the **SERTIVESCONAV** at the next election.

20. She is accountable only to the managing **RTOCERID**.

The alphabet is here to help you with these questions.
Find the next pair of letters in the series:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

21. CW, GQ, KK, OE, ?

A	SY	B	SZ	C	SL	D	TY	E	RY
----------	----	----------	----	----------	----	----------	----	----------	----

22. XN, RR, LV, FZ, ?

A	ZE	B	YD	C	ZC	D	XE	E	ZD
----------	----	----------	----	----------	----	----------	----	----------	----

23. EN, JM, OK, TH, ?

A	YR	B	YD	C	XF	D	YF	E	YC
----------	----	----------	----	----------	----	----------	----	----------	----

24. LO, OU, SA, VG, ZM, ?

A	DT	B	CT	C	CS	D	BS	E	CU
----------	----	----------	----	----------	----	----------	----	----------	----

25. AV, ER, IO, MK, QH, ?

A	UL	B	TL	C	UE	D	UL	E	UD
----------	----	----------	----	----------	----	----------	----	----------	----

26. GZ, IW, KW, MT, OT, ?

A	QQ	B	RT	C	QT	D	QS	E	QP
----------	----	----------	----	----------	----	----------	----	----------	----

27. Eric, Peter, Michael, Ian and Alan play football at the weekend. They are all strikers. Peter scored nine goals more than Alan and finished between Michael and Eric. Ian didn't get the lowest tally but was in single figures. Michael played every game and was top goal scorer. Eric wanted two more goals to finish joint top scorer but 17 were required.

If the above statements are true, this must mean that only one of the following statements can be true. Which one?

- A.** Ian scored nine goals.
- B.** Peter was the top scorer.
- C.** Ian and Alan scored the same number of goals.
- D.** Alan scored seven goals.
- E.** Everyone scored above ten goals.

In the following sentences, a four-letter word is hidden between two words that are next to each other. Find the hidden word and mark the two words on the answer sheet.

28. The buffalo gobbled up the grass. _____

29. Harry ordered a muffin during his lunch break. _____

30. Majid spotted the dogs wagging their tails. _____

31. On safari we saw a hippo, leopard and an elephant. _____

32. The thief stepped on the twig slowly. _____

33. With the cheese sauce, is the spaghetti edible? _____

34. After hearing the bird, Peter also looked up. _____

END OF VERBAL SECTION



Year 5

Summer Term

Practice

NON- VERBAL

First name: _____

Last name: _____

This paper contains 16 Marks

- a. This paper consists of two 4-minute sub tests.**
- b. Read the instructions carefully.**
- c. Do not begin the test or open the booklet until told to do so.**
- d. Work as quickly and as carefully as you can.**



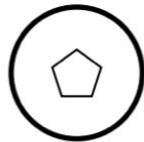
NON-VERBAL REASONING TEST 1

Look at this set of pictures.
Identify the one that is most unlike the others.

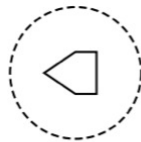
1.



A



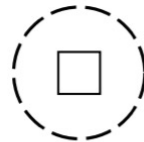
B



C



D



E

2.



A



B



C



D

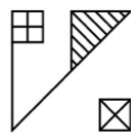


E

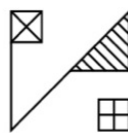
3.



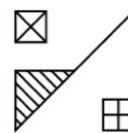
A



B



C



D

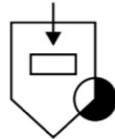


E

4.



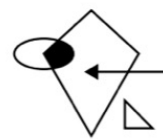
A



B



C



D



E

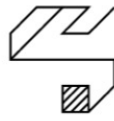
5.



A



B



C

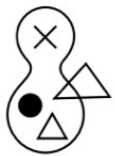


D



E

6.



A



B



C



D



E

7.



A



B



C



D

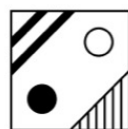


E

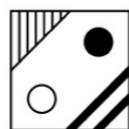
8.



A



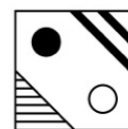
B



C



D



E

END OF NON-VERBAL REASONING SUBTEST 1
DO NOT TURN OVER UNTIL TOLD TO DO SO.



NON-VERBAL REASONING TEST 2

Each letter represents an individual feature in the picture to its left.
Work out which feature is represented by each letter. Then apply the rules to the picture in the box and select the code that fits it.

1.



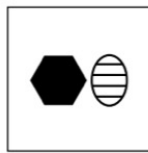
RXF



RYG



SZF



RZG

SXG

SYF

RZF

SYG

A

B

C

D

E

2.



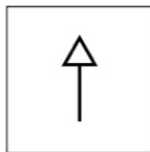
WL



XL



YM



WM

XM

YL

ZM

ZL

A

B

C

D

E

3.



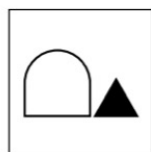
PXL



QYM



PYN



QXN

QZL

PYL

PYM

QYL

A

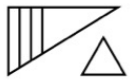
B

C

D

E

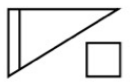
4.



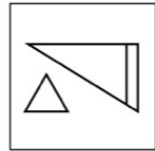
GS



HS



GT



GS

HS

GT

HT

FT

A

B

C

D

E

5.



PX



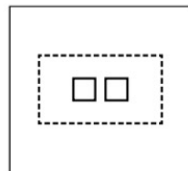
QY



RZ



PY



QX

RX

QZ

PZ

A

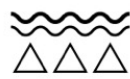
B

C

D

E

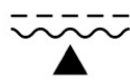
6.



LR



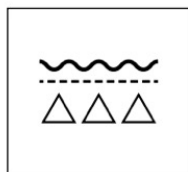
MS



NR



MT



LS

MR

LT

NS

NT

A

B

C

D

E

7.



RFL



SGM



RHN



TGL



SFN

A

THM

B

SHL

C

RGL

D

TFN

E

8.



XPF



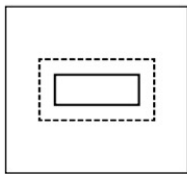
YQG



ZRF



XSH



YRH

A

XQF

B

ZSG

C

YPH

D

ZQF

E

END OF NON-VERBAL REASONING SUBTEST 2



Year 5

Summer Term

Practice

MATHS

First name: _____

Last name: _____

This paper contains 40 marks

- a. This paper consists of a 30 minute test.**
- b. Read the instructions carefully.**
- c. Do not begin the test or open the booklet until told to do so.**
- d. Work as quickly and as carefully as you can.**



Maths Paper

1. What is two sevenths of ninety eight?

- A 14 B 28 C 35 D 49 E 21

2. Calculate 17.5×1.002

- A 35 B 0.0035 C 17.535 D 1.7535 E 17.0535

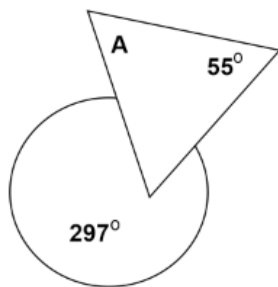
3. Christian has three times as many marbles as Peter, who has twice as many marbles as Ahmed. They have 360 marbles between them. How many marbles does Peter have?

- A 40 B 60 C 80 D 100 E 120

4. If the exchange rate between the UK pound and US Dollar is 1.38, approximately how many pounds will 100 US Dollars get you?

- A 1.38 B 13.8 C 138 D 72 E 65

5. Calculate the size of angle A:



- A 62° B 72° C 64° D 66° E 68°

6. What fraction of 5.6kg is 800g?

- A $\frac{1}{3}$ B $\frac{1}{14}$ C $\frac{1}{7}$ D $\frac{2}{5}$ E $\frac{2}{7}$

7. Robert is working with a substance that has a temperature of -6°C . When he heats it up, it increases in temperature by 9 degrees every minute. What will the temperature of the substance be after 9 minutes of heating?

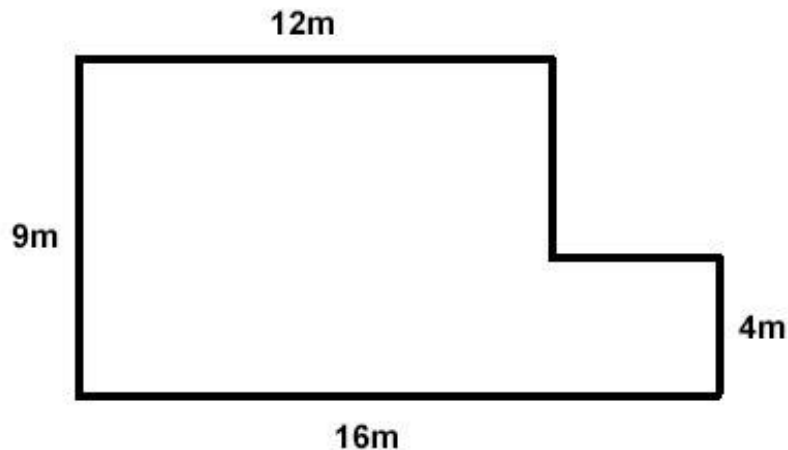
- A 65° B 75° C 70° D 68° E 76°

8. What number finishes this sequence?

16, 19, 35, 54,

- A 72 B 86 C 88 D 89 E 73

9. Calculate the area of this shape:



- A 124m^2 B 154m^2 C 108m^2 D 132m^2 E 120m^2

10. What is the perimeter of the shape in Q9?

- A 41m B 45m C 82m D 60m E 50m

11. Guy wants to buy a console at £790. He decides to pay a 20% deposit and pay the balance over 8 equal monthly instalments. What is the value of 3 months' worth of payments?

- A £79 B £158 C £210 D £250 E £237

12. An adventure park has 850 visitors a day. The cost of a ticket is £9. 145 visitors also buy a fast pass to avoid the queues. The cost of a fast pass is £7. How much money does the funfair take in one day?

- A £8,665 B £8,905 C £9,005 D £8,725 E £8,745

13. Ranjeet wants to work out the volume of a cube. She measures the length of one of its sides as 7cm. What is the volume of Ranjeet's cube?

- A 21cm^3 B 49cm^3 C 42cm^3 D 434cm^3 E 343cm^3

14. What is three cubed plus six squared?

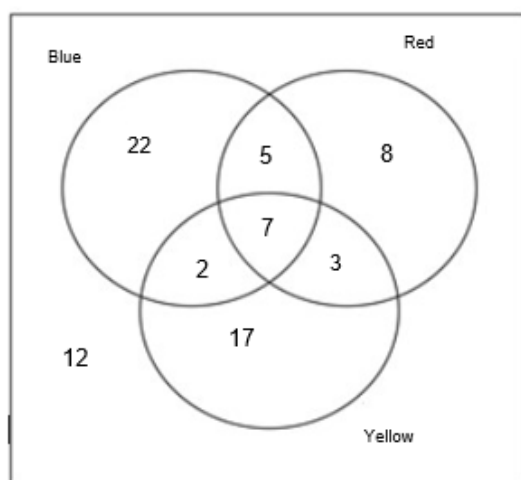
- A 61 B 65 C 44 D 63 E 41

15. If $19a - 28 = 10a + 80$

What is the value of a?

- A 15 B 12 C 16 D 14 E 12

16. Year 5 were asked for their favourite colours and the results recorded in this Venn diagram. How many pupils didn't like red?



- A 12 B 51 C 53 D 29 E 34

17. Lucy's luggage weights 1.62kg, 743g and 249g. Clara's weighs 686g. How much heavier is the total weight of Lucy's luggage than Clara's?

- A 1.916kg B 2.006kg C 19.26kg D 1.862kg E 1.926kg

18. What is the highest number out of these?

0.048

4.65%

0.00049

0.0138

$\frac{5}{200}$

- A 0.048 B 4.65% C 0.00049 D 0.0138 E $\frac{5}{200}$

19. Work out:

$$3\frac{4}{9} + 2\frac{5}{6}$$

- A $6\frac{5}{18}$ B $6\frac{1}{3}$ C $6\frac{1}{9}$ D $7\frac{1}{54}$ E $5\frac{15}{54}$

20. The opposite sides of a dice always add up to seven. Paul throws three dice and they land 5, 1, 4. He has a formula that $17n - 34 = x$. n is the total of the opposite sides of the dice when they land. What is x after these three throws?

- A 152 B 169 C 151 D 153 E 170

21. The price in pounds (p) of going to the cricket can be worked out using the formula:

$$p = 35a + 15b$$

In this formula a stands for the number of adults and b stands for the number of children. What is the price if 3 adults and 5 children go to the cricket?

- A £205 B £150 C £180 D £195 E £235

22. What is the total sum of the factors of 18?

- A 38 B 37 C 39 D 12 E 36

23. An industrial tank holds 750 litres of water. The tank can be emptied at 1500ml every 30 seconds. How long does it take the tank to empty?

- A 250 minutes B 500 minutes C 300 minutes D 400 minutes E 200 minutes

24. The football team has booked 5 coaches for the match. Each coach holds 40 people. The coaches are fully booked, but on the day 15% of those that booked fail to turn up. How many people end up going to the match?

- A 30 B 170 C 174 D 168 E 180

25. Pete works in the store. Each day he earns $8h + (0.25CxP)$ where h is his hourly wage. C is the price of a product he sells and P is the number of products he sells, which is his commission. If his wage is £9 an hour and the average price of a product he sells is £2, how much does he earn every seven days if he sells 10 products a day?

- A £507.50 B £550 C £520.50 D £545 E £539

26. Fred is working on a formula ($n^2 + 9$). What is the value of n when the answer is 234?

- A 13 B 15 C 14 D 12 E 17

27. At the theatre, the ratio of fathers to children to mothers in the audience is 5:8:2. There are 100 fathers in the audience. How many children are there in the audience?

- A 160 B 200 C 80 D 180 E 130

28. The whole class averaged 65 marks in the test. If their total marks were 1,365, how many pupils are in the class?

- A 19 B 20 C 21 D 22 E 23

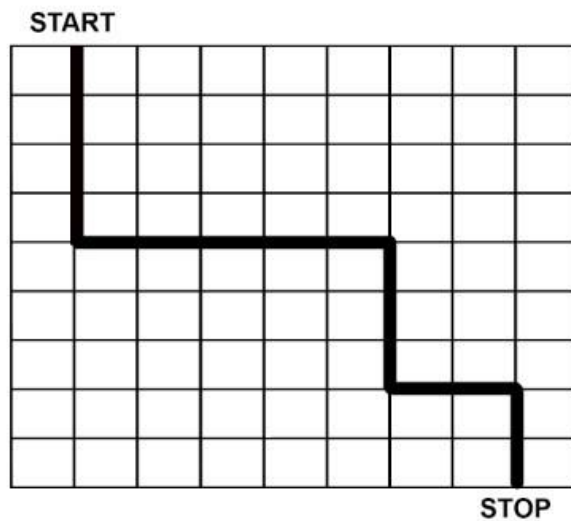
29. Jackie has 63 games. Three sevenths are role playing, two sevenths are action and the remainder are sports. How many sports games does she have?

- A 27 B 18 C 9 D 22 E 36

30. Rohit has four times the amount of badges than Chloe. Deepak has five more badges than Chloe. If they have 71 pencils altogether, how many pencils does Deepak have?

- A 11 B 14 C 16 D 20 E 22

31. Phil is programming his robot's movements to go from START to STOP. Which are the correct movements?



- | | | | | | | | | | |
|----------|--|----------|--|----------|---|----------|---|----------|--|
| A | FORWARD 4
LEFT 90°
FORWARD 5
RIGHT 90°
FORWARD 3
RIGHT 90°
FORWARD 2
RIGHT 90°
FORWARD 2 | B | FORWARD 4
LEFT 90°
FORWARD 5
LEFT 90°
FORWARD 3
LEFT 90°
FORWARD 2
RIGHT 90°
FORWARD 2 | C | FORWARD 4
LEFT 90°
FORWARD 5
RIGHT 90°
FORWARD 2
LEFT 90°
FORWARD 2
RIGHT 90°
FORWARD 2 | D | FORWARD 4
LEFT 90°
FORWARD 5
RIGHT 90°
FORWARD 3
LEFT 90°
FORWARD 2
RIGHT 90°
FORWARD 2 | E | FORWARD 4
RIGHT 90°
FORWARD 5
RIGHT 90°
FORWARD 3
LEFT 90°
FORWARD 2
RIGHT 90°
FORWARD 2 |
|----------|--|----------|--|----------|---|----------|---|----------|--|

32. A number 'C' times 100 is 3900 and a number 'D' times 1000 is 1300. What is the value of C - D?

- A** 38.9 **B** 37.7 **C** 3.77 **D** 377 **E** 3.89

33. What are the next two numbers in this sequence?

2,3,5,7,11,13,17,19, ,

- A** 21,23 **B** 23,26 **C** 23,24 **D** 23,29 **E** 23,30

34. Consider these three expressions:

$$2y + 3$$

$$3y + 9$$

$$4y + 3$$

What is the mean of these expressions?

- A** $3y + 9$ **B** $3y + 6$ **C** $4y + 8$ **D** $3y + 5$ **E** $2y + 6$

- 35.** A shop sells washing powder in 650g packs.

Jacob has no washing powder.

He estimates that he does 2 washes a week, using 40g each wash.

Jacob wants to buy enough washing powder for 13 weeks.

How many packs of washing powder does Jacob need to buy?

- A** 1 **B** 5 **C** 2 **D** 6 **E** 4

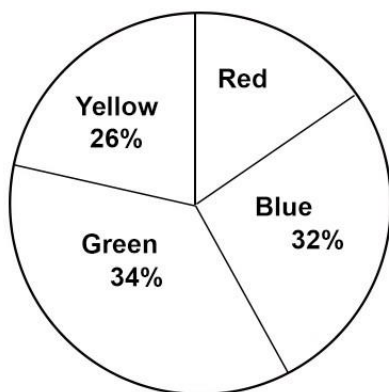
- 36.** The range in temperature across a week in London was 22° . If the average temperature was 13° and the highest temperature 18° , what was the lowest temperature during that week?

- A** 5° **B** 0° **C** 1° **D** -5° **E** -4°

- 37.** The Bloggs family eat three and a half packets of cereal each week. They bought 20 packets at the start of the month. How many packets will they have left after 4 weeks?

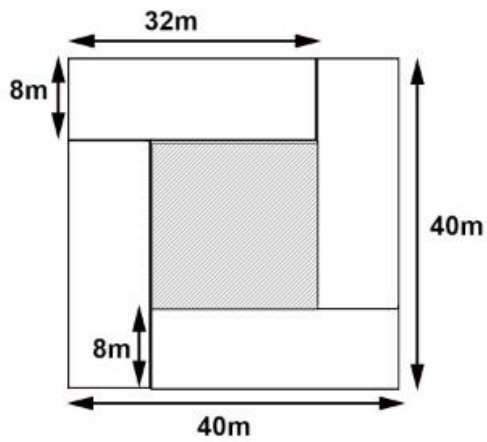
- A** 8 **B** 9.5 **C** 5.5 **D** 6 **E** 6.5

- 38.** A year of pupils were asked which colour they liked best.
76 pupils said blue. How many liked red? *Not to scale*



- A** 32 **B** 150 **C** 250 **D** 256 **E** 19

39. Calculate the area of the shaded square.



- A 590m^2 B 576m^2 C 550m^2 D 486m^2 E 600m^2
40. Dave and Cheryl have 405 marbles between them. They split them in the ratio 4:5, with Dave having the smaller share. How many cards does Cheryl have?
- A 210 B 230 C 220 D 205 E 225

ENGLISH ANSWERS

- 1 B
- 2 E
- 3 B
- 4 B
- 5 E
- 6 B
- 7 A
- 8 D
- 9 E
- 10 C
- 11 D
- 12 B
- 13 A
- 14 E
- 15 D
- 16 D
- 17 E
- 18 A
- 19 E
- 20 D
- 21 A
- 22 B
- 23 E
- 24 D
- 25 A
- 26 C
- 27 N
- 28 C
- 29 D
- 30 N
- 31 D
- 32 D
- 33 C
- 34 N
- 35 C
- 36 C
- 37 E
- 38 E
- 39 C
- 40 B
- 41 B
- 42 C
- 43 A
- 44 B
- 45 C

Verbal Reasoning Answers

1. Queer & outlandish
2. Macaw & racoon
3. Beetle & iguana
4. Programmer & code
5. Manager & royalty
6. Pilot & plane
7. Mantlepiece & decorate
8. hog & hamster

9. A

10. C

11. E

12. C

13. A

14. Pluto

15. Rearrange

16. Crocodiles

17. Meningitis

18. Immediately

19. Conservatives

20. Director

21. (A) SY

22. (E) ZD

23. (B) YD

24. (C) CS

25. (E) UD

26. (A) QQ

27. D

28. Logo

29. Find

30. Swag

31. Poke

32. Wigs

33. Tied

34. Solo

Non-Verbal Reasoning

Section 1

1. C

2. E

3. B

4. D

5. E

6. C

7. C

8. A

Section 2

1. C

2. B

3. A

4. D

5. D

6. C

7. E

8. A

Maths Answers

- 1 B
- 2 C
- 3 C
- 4 D
- 5 A
- 6 C
- 7 B
- 8 D
- 9 A
- 10 E
- 11 E
- 12 A
- 13 E
- 14 D
- 15 B
- 16 C
- 17 E
- 18 A
- 19 A
- 20 D
- 21 C
- 22 C
- 23 A
- 24 B
- 25 E
- 26 B
- 27 A
- 28 C
- 29 B
- 30 C
- 31 D
- 32 B
- 33 D
- 34 D
- 35 C
- 36 E
- 37 D
- 38 E
- 39 B
- 40 E