Do not turn over or open this booklet until told to do so

## CEA

## Common Entrance Assessment

## Paper 2

Saturday 24 November 2012
Time: 1 Hour

Please fill in the following from your admission card:

Your Candidate Number $\qquad$

Your Assessment Centre $\qquad$

Your Date of Birth

## Page 1

1. Jack takes $\mathbf{3 0}$ marbles to school. At break time he wins $\mathbf{8}$ marbles in a game. At lunchtime he loses $\mathbf{1 5}$ marbles. How many marbles does Jack have now? Write your answer in the space below.
$\qquad$ marbles
2. Look at the function machine below.
In



Use this function machine to complete the table below.

| In | Out |
| :--- | :--- |
| 2 | 14 |
| 7 |  |
|  | 4 |

3. Look at the statement below.

$$
b \div 25=5
$$

What is the value of $\mathbf{b}$ ? Write your answer in the space below.
4. How many degrees are there in one and a quarter whole turns? Write your answer in the space below.
$\qquad$ o

## Page 2

5. Peter asks a number of adults about the colour of their car. He draws the pie chart below.


He finds out that 7 adults each had a yellow car. How many adults had a red car? Write your answer in the space below.
$\qquad$ adults
6. How many adults in total did Peter ask? Write your answer in the space below.
$\qquad$ adults
7. It is Samuel's birthday. He multiplies his age by $\mathbf{3}$ and then adds 6 years. He gets an answer of $\mathbf{5 1}$ years. What is his age? Write your answer in the space below.

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8. Rebecca leaves her house and walks $2 \mathbf{k m}$ north. She then walks $\mathbf{6} \mathbf{~ k m}$ east and then 2 km south. How far is she from her house? Write your answer in the space below.
$\qquad$ km

## Page 4

## Morning

I stagger up to the sink and turn on the tap.
A waterfall gushes out at me, spraying my pyjamas with an icy cold wake up call.
I lean forward and squint to see
what the mirror holds for me today.
It's not a pretty sight.

Toothpaste at the ready,
the toothbrush buzzes into life.
Enveloped in my mouth it makes my brain rattle.
Minty fresh and shiny white,
these gnashers are ready to face the world.
It's a pity I'm not!

A quick splash of cool water to the face and now I am fully awake.
Breezing to my bedroom, I quickly dress, rush downstairs and begin to make some breakfast - fuel for the day ahead.
It's time to go.

Mum's in the car, honking the horn, hurrying me along.
Lunch - check. Bag packed. Homework -
hopefully not all wrong!
We're off. Ready to face another day.
9. Look at verse two of the poem. Which word tells us that the poet uses an electric toothbrush? Write your answer in the space below.

## Page 5

10. In verse one of the poem, which phrase of six words does the poet use to indicate the speed with which the water flows from the tap?
Write your answer in the space below.
11. An apostrophe is used in four different words in this poem. For each of these words write the two words that mean the same as the word containing the apostrophe in the space below. The first one has been done for you.

It's
It is
I'm
Mum's
We're
12. The word stagger is used in the poem. The past tense of stagger is staggered. Write the past tense of each of the words below in the space provided. The first one has been done for you. Be careful with your spelling.

| splash | splashed |
| :--- | :--- |
| hurry |  |
| make |  |
| rush |  |

## Page 6

13. The word breezing is used in verse three. What is the meaning of the verb breeze? Tick $\checkmark$ the best answer below.

To move quickly or casually.


To walk faster than the wind. $\square$

To cause draughts when walking. $\square$
14. Based on your reading of verse four, consider each statement below and decide if it is True or False. Tick $\square$ the box to show your answer.

True False
The poet's mother is ready first.
The poet is hurrying out of the house.


The poet is feeling unwell.
$\square$

$\square$
15. Based on your reading of the poem, consider each statement below and decide which one is true? Tick the true statement.

In verse one the poet is fully awake.


In verse three the poet prepares food. $\square$
In verse four the poet packs his bag. $\square$
16. What is the number which is exactly half-way between 94 and $\mathbf{1 7 8}$ ?

Write your answer in the space below.
17. A box of sweets costs $£ \mathbf{1 . 5 0}$. What is the largest number of boxes I can buy with $\mathbf{£ 1 0}$ ? Write your answer in the space below.
$\qquad$ boxes
18. Look at the sequence of numbers below. Complete the sequence by writing the correct numbers in the $\mathbf{2}$ spaces provided.

$$
62
$$

57

$$
47
$$

19. The table below shows the temperature in Prague at different times of the day. There are $\mathbf{3}$ temperatures missing from the table.

| Time | 6 am | 9 am | 12 pm | 3 pm | 8 pm |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Temperature <br> in ${ }^{\circ} \mathrm{C}$ | -8 |  |  | 14 |  |

You are given the following information. It will help you to fill in the blank spaces in the table.

The temperature increased by $6^{\circ} \mathrm{C}$ between $\mathbf{6 a m}$ and 9 am .
The temperature increased by $12^{\circ} \mathrm{C}$ between 9 am and $\mathbf{1 2} \mathrm{pm}$.
The temperature decreased by $9^{\circ} \mathrm{C}$ between $\mathbf{3 ~ p m}$ and $\mathbf{8 ~ p m}$.
Use this information to complete the table above.

## Page 8

20. The diagram below shows a shaded square inside a larger square. Each side of the large square measures $\mathbf{1 4} \mathbf{~ c m}$.


Calculate the area of the shaded square. Write your answer in the space below.
$\qquad$
21. How many seconds are there in one hour? Write your answer in the space below.

## Page 9

22. The line $\mathbf{C D}$ is shown in the grid below. The point $\mathbf{G}$ is also shown.


What are the coordinates of the point $\mathbf{G}$ ? Write your answer in the spaces below.
$\qquad$ , $\qquad$ )
23. If a line is drawn from $\mathbf{G}$ to $\mathbf{C}$ and a line is drawn from $\mathbf{G}$ to $\mathbf{D}$, we get a triangle. What type of triangle is this? Tick $\nabla$ the correct box below. scaleneequilateral $\square$ isosceles $\square$

The passage you are about to read contains five errors. Read the passage and then answer the questions that follow it.

## My trip to Belfast Zoo.

Yesterday, my class went on a school trip to the zoo. We had a great (line 2) time and learned lots of things about the various animals who live there. (line 3) Some of the many intresting animals we saw were the lemurs and the (line 4) meerkats. I really liked the lemurs ringed tails and the meerkats (line 5) reminded me of the ones from the television advertisements. There (line 6) were penguins, chimps, kangaroos and even farm animals. One thing (line 7) I didn't like about the zoo is the fact that it's built on the side of Cave Hill. Whoever thought of that. By the end of the day my legs really hurt and I had some big blisters on my heels. We stopped for a packed lunch at the lake were the flamingos live, After lunch we played in the park for a while. Jodie fell and grazed her knee. The zoo is really called Belfast Zoological Gardens. It's over seventy-five years old and during the Second World War they were (line 8) (line 9) (line 10) (line 11) (line 12) (line 13) forced to destroy some dangerous animals, in case bombings led to (line 15) their escape. I will probably go back to the zoo in the summer with my mum, dad and sister.
24. A question mark is needed instead of a full stop in one line of the passage. Tick $\nabla$ the number of the line where the question mark is needed.
line 3
line 9
line 13

line 16


## Page 11

25. There is a spelling error in one of the lines. Tick $\square$ the number of the
26. In one line of the passage a comma has been used incorrectly. A full stop rather than a comma should have been used. Tick $\square$ the number of the line in which this error was made.
line 7
line 11
line 15
line 17
```7
```

27 A word has been used incorrectly in the passage. Tick $\square$ the number of the line where the error was made.
line 3
line 8
line 11
line 13

## Page 12

28. There is an apostrophe missing from one of the words in the passage. Tick $\checkmark$ the number of the line containing the word with the missing apostrophe.
line 5 $\square$
line 6 $\square$
line 7
line 14


Do not write in this column
29. Look at the diagram below. It shows a square rose bed, in the centre of a square garden. The garden has side $\mathbf{8 m}$ and the rose bed has side $\mathbf{6 m}$.


How much further is it to walk around the outside edge of the garden than the outside edge of the rose bed? Write your answer in the space below.
$\qquad$
30. Look again at the diagram of the garden. What is the area of the shaded part of the diagram? Write your answer in the space below.
$\qquad$ $\mathrm{m}^{2}$

## Page 14

31. Boxes $\mathbf{X}, \mathbf{Y}$ and $\mathbf{Z}$ contain chocolates. There are $\mathbf{3}$ types of chocolates: dark, milk and white. The number of chocolates in each box is:

| Box X | Box Y | Box Z |
| :---: | :---: | :---: |
| 1 dark | 5 dark | 2 dark |
| 3 milk | 3 milk | 2 milk |
| 1 white | 2 white | 1 white |

I choose a chocolate at random from each box. For one of the boxes the chance of picking a dark chocolate is "evens". Which box? Write the correct letter $\mathbf{X}, \mathbf{Y}$ or $\mathbf{Z}$ in the space below.

Box $\qquad$
32. A tin contains $\mathbf{4 5 0} \mathbf{g}$ of tomato soup and costs $\mathbf{2 0 p}$. Another tin contains 480 g of tuna and costs $£ 1.30$.

What is the total cost of $\mathbf{6}$ tins of tomato soup and $\mathbf{3}$ tins of tuna?
Write your answer in the space below.
£ $\qquad$
33. How much tuna is there in the $\mathbf{3}$ tins? Give your answer in kg and g . Write your answer in the spaces provided.
$\qquad$ kg and $\qquad$ g
34. A train leaves Belfast at $\mathbf{1 7 . 4 0}$ and arrives in Lisburn at $\mathbf{1 8 . 2 0}$.

How long does the journey from Belfast to Lisburn take?
Write your answer in the space below.
$\qquad$ minutes
35. Another train leaves Belfast at $\mathbf{1 8 . 4 5}$ and the journey to Lisburn takes $\mathbf{4 2}$ minutes. At what time will this train arrive in Lisburn? Give your answer using the $\mathbf{1 2}$ hour clock. Write your answer in the space below.
36. Patterns are formed from square tiles. The first three patterns in a sequence are shown below.


Pattern 1


Pattern 2


Pattern 3

How many tiles are needed in total to make the fifth and sixth patterns in the sequence? Write your answer in the space below.
$\qquad$ tiles

## Pastures New

The cardboard boxes, labelled and piled high, Line the walls of each room like coffins. Squares of faded carpet mark the floors, Holes in the walls like bullet holes, Bare light bulbs shine an eerie ghost light.

The moving van rumbles along,
Down unknown roads and motorway.
We stare out the window of Mum's car:
Eyes glistening, wide and teary.

Even Dad is silent on this journey,
Usually his chatter drowns the sound of the engine.
Behind us we leave familiar surroundings:
Our school, our garden, friends and family.

We're moving on.
37. Which word in verse two is closest in meaning to sparkling? Write your answer in the space below. Be careful with your spelling.
38. Look at the four words below. Which word describes the family's feelings in this poem? Tick $\sqrt{ }$ the best answer.
joyous

fearful

sad

excited

39. The four words coffins, along, eerie and stare are used in the poem. Tick $\checkmark$ the correct box below to show how each one has been used.

|  | verb | noun | adjective | adverb |
| :--- | :--- | :--- | :--- | :--- |
| coffins |  |  |  |  |
| along |  |  |  |  |
| eerie |  |  |  |  |
| stare |  |  |  |  |

40. What is the poem about? Look at the four descriptions below. Tick $\sqrt{ }$ the best description.

Going on holiday
Moving house

A death in the family

A
A shooting incident

41. The word labelled is used in verse one of the poem. It is the past tense of the verb to label. Write the past tense of the following verbs in the spaces below. These words are not in the poem. Be careful with your spelling.
cancel $\qquad$
travel $\qquad$
edit $\qquad$
admit $\qquad$

## Page 18

42. Based on your reading of the poem, consider each statement below and decide if is true or false. Tick $\square$ the box to show your answer.

## True False

The poet's father is normally quiet in the car.
Their destination is just a few streets away.
The poem is about a childhood experience.
$\square$
$\square$
$\square$
$\square$
43. Which word in verse one might suggest that the family had lived in the house for a long time? Write your answer in the space below.

Do not write in this column
44. A map has the following scale:

## 1 centimetre represents 4 kilometres.

A post office is $\mathbf{2 4}$ kilometres from a cinema. How far apart are they on the map? Write your answer in the space below.
$\qquad$ cm
45. A school and a church are 3.2 centimetres apart on the map. What is the actual distance between the school and the church? Write your answer in the space below.
$\qquad$ km
46. Look at the diagram below. There are 5 markers and the distance between markers is 5 metres. Pam starts at marker 1, runs directly to marker 2 and then back to marker 1. She then runs from marker 1 to marker 3 and back to marker 1. She continues in this way until she has run back from marker 5 to marker 1.


How far does Pam run in total? Write your answer in the space below.

Page 20
47. Look at the $\mathbf{3}$ statements below. Tick $\checkmark$ True or False for each statement.
0.7 is less than 0.71
6.2 is less than 6.02
0.01 is greater than 0.1

48. Paula's graph can be used to convert between pints and litres.

(a) Use her graph to convert 10 pints to litres. Write your answer in the space below.
$\qquad$ litres
(b) Use her graph to convert 24 litres to pints. Write your answer in the space below.
49. A metal coin contains copper, nickel and tin.
$60 \%$ of the coin is copper.
$\frac{1}{4}$ of the coin is nickel.
The rest of the coin is tin.
(a) What percentage of the coin is nickel?
$\qquad$ $\%$
(b) What percentage of the coin is tin?
$\qquad$ \%
50. Andy has an email password. Here is some information about it.

It is a $\mathbf{4}$ digit number.
The digits increase in size from left to right.
Each digit appears only once.
The first and last digits multiply to give $\mathbf{1 8}$.
The middle two digits add to give 7 .
Write the 4 digits of the password in the correct spaces below.
51. At the start of 2012 Gemma is $\mathbf{1 . 2} \mathbf{~ m}$ tall. By the end of 2012 she has grown by 4 cm . How tall is she at the end of 2012? Give your answer in metres. Write your answer in the space below.
$\qquad$ metres

## Page 22

## Jane

"Last one in's a rotten egg," she shouted over her shoulder, her voice distorted by the breeze as I struggled to keep up. Jane ran ahead of me, her pigtails dancing behind her, the checked skirt of her school uniform flapping in the wind.

Jane always took charge. As the eldest, she set the rules and was never awarded the offensive titles with which she crowned her little sister. I was always lagging behind, and had long since given up caring what kind of 'egg' I was. My short legs couldn't contend with her long, graceful strides and, although I upheld the pretence of competition, I'd given up trying to win the race home from school.

But still, I was desperate to get there. Our arrival home signalled the beginning of our daily adventures. As soon as our feet were over the threshold of the little family cottage, uniforms were discarded and the constraints of a day's labour were left behind. Mrs Tate's French lessons and Mr Hughes' English class became a thing of the past. We were off on our travels!

Jane raced down the stairs ahead of me, already dressed, and took her position at the head of the couch. I trundled behind her, still pulling my blue sweater over my head as I reached the bottom step. Taking my rightful place behind my big sister, I braced myself for an afternoon of exploration.
"All aboard?" Jane's throaty call mimicked that of a train conductor we had once encountered on a trip to the seaside with our parents.
"Then off we go," she declared, without checking to see where I was.

And that was it. We were off on our travels! I could see the world with my sister by my side.
52. Based on your reading of the passage, consider each of the three statements below. Decide if they are true or false. Tick $\checkmark$ the box to show your answer.

## True False

Jane is youngest in the family.

Jane is an only child.
Jane has a younger sister.

$\square$
$\square$
$\square$
53. Look at paragraph two in the passage. Which phrase of three words describes how Jane walks on her way home from school?

Write your answer in the space below.
54. Look at paragraph three of the passage. Why is the writer desperate to get home? Tick $\square$ the best answer below.

She hates wearing her school uniform. $\square$
She dislikes going to school every day.

She loves to play with her older sister.
55. Look at paragraph four of the passage. Which two word phrase tells us that Jane has changed her clothing?

Write your answer in the space below.
56. Paragraph five of the passage contains the words "Jane's throaty call mimicked that of a train conductor". Look at the four phrases below. Which phrase best describes the meaning of mimicked in the passage? Tick $\square$ the best answer.
seemed sillier than
seemed louder than
sounded the same as
sounded funnier than


57. Write the words below in alphabetical order in the spaces provided. The first one has been done for you.
shouted shoulder sister signalled sweater shoulder
$\qquad$
$\qquad$
$\qquad$
$\qquad$
58. Based on your reading of the passage, what is the writer's attitude to Jane? Look at the three statements below. Tick $\checkmark$ the best answer.

She resents her.


She admires her.


She irritates her. $\square$

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