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

## CEA

## Common Entrance Assessment

## Paper 2

Saturday 27 November 2010

## Time: 1 Hour

Please fill in the following from your admission card:

Your Candidate Number $\qquad$

Your Assessment Centre $\qquad$

Your Date of Birth

Answer all 58 questions in this booklet

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## Page 1

1. Look at the 2 calculations below. Complete each calculation by finding the missing number. Write your answers in the spaces below.
(a) $\qquad$ $+156=425$
(b) $7 x$ $\qquad$ $=952$
2. The temperature in the fridge section of a fridge-freezer is $\mathbf{5}^{\mathbf{0}} \mathbf{C}$. The temperature in the freezer section is $\mathbf{2 3}^{\mathbf{0}} \mathrm{C}$ lower. What is the temperature in the freezer section? Write your answer in the space below.
$\qquad$ ${ }^{0} \mathrm{C}$
3. The series of patterns below is made using a mixture of white and shaded square tiles. Pattern 1 contains 4 tiles. It has two white and two shaded tiles.


Pattern 1


Pattern 2


Pattern 3

If this series of patterns is continued, what is the total number of tiles in Pattern 6? Write your answer in the space below.
$\qquad$ tiles
4. Another pattern in the same series has $\mathbf{1 1}$ shaded tiles. What is the total number of tiles in this pattern? Write your answer in the space below.
$\qquad$ tiles

## Page 2

5. Look at Pattern 3 in question 3. In Pattern 3 what percentage of the pattern is shaded? Write your answer in the space below.
$\qquad$ \%
6. Look at the clock face below.


The hands of the clock show that the time is 7 o'clock. What is the value of the obtuse angle between the hands of the clock? Write your answer in the space below.
$\qquad$ 0
7. A film on TV lasts for $\mathbf{1 0 0}$ minutes. It finishes at $\mathbf{0 0 1 5}$. At what time did the film start? Write your answer, as a 24 hour clock time, in the space below.
8. Mark makes a sequence using this rule:

## Take half of the previous number and then add one

Using this rule, write the $\mathbf{2}$ missing numbers in Mark's sequence below. Write your answers in the spaces provided.
$\qquad$ , 386, 194, $\qquad$ , 50, 26

## The New Boy

The door swung inward. I stood and breathed
The new-school atmosphere.
The smell of polish and disinfectant,
And the flavour of my own fear.
I followed into the cloakroom; the walls
Rang to the shattering noise
Of boys who barged and boys who banged;
Boys and still more boys!
A boot flew by me. Its angry owner
Pursued with force and yell:
Somewhere a man snapped orders; somewhere
There clanged a warning bell.
And there I hung with my new schoolmates;
They pushing and shoving me; I
Unknown, unwanted, pinned to the wall;
On the verge of ready to cry.
Then, from the doorway, a boy called out:
'Hey you over there! You're new!
Don't just stand there propping the wall up!
I'll look after you!'
I turned; I timidly raised my eyes;
He stood and grinned meanwhile;
And my fear died, and my lips answered
Smile for his smile.
He showed me the basins, the rows of pegs;
He hung my cap at the end;
He led me away to my new classroom...
And now that boy's my friend.

> John Walsh

## Page 4

9. Look at verse two of the poem. Which word in verse two has the same meaning as the words breaking into many pieces? Write the word in the space below.
10. In verse four we learn that the boy is very upset. What phrase of seven words in verse four tells us he's upset? Write the phrase in the space below.
11. The word its is used in the poem. It's and its sound the same but have different meanings. Complete the sentences below correctly by circling either the word it's or its in each case.

I enjoyed reading the poem. It's Its a poem about a boy arriving at a new school. In particular, it's its title is interesting as it tells the reader what it's its about.
12. What word in verse six has the same meaning as responded? Write the word in the space below.
13. The words timidly, new, pursued and atmosphere are used in the poem. Tick $\checkmark$ the correct box to show whether each one has been used in the poem as a noun, verb, adverb or adjective.

|  | noun | verb | adverb | adjective |
| :--- | :--- | :--- | :--- | :--- |
| timidly |  |  |  |  |
| new |  |  |  |  |
| pursued |  |  |  |  |
| atmosphere |  |  |  |  |

## Page 5

14. Look at the list of four verbs below. Write the present tense of each of the verbs in the spaces below. Be careful with your spelling. The first one has been done for you.

| swung | swing |
| :--- | :--- |
| hung |  |
| grinned |  |
| breathed |  |

15. According to the poem, only two of the statements below are correct. Tick $\checkmark \checkmark$ the two correct statements.

## The boy is frightened because

he is new to the school and everything is unfamiliar. $\square$ there is a lot of noise and confusion in the corridor. he isn't good at anything related to mathematics. there is a lot of noise and confusion in the cloakroom.
$\square$
$\square$
$\square$
16. The cuboid below is 11 cm by 8.5 cm by 7 cm .


How many edges does the cuboid have? Write your answer in the space below.
$\qquad$
17. What is the area of the largest face of the cuboid? Write your answer in the space below.
$\qquad$ $\mathrm{cm}^{2}$
18. What is the volume of the cuboid? Write your answer in the space below.
$\qquad$ $\mathrm{cm}^{3}$
19. How many quarter-litre glasses can be filled from a container which holds $\mathbf{1 2 . 5}$ litres of fruit juice? Write your answer in the space below.
$\qquad$

## Page 7

20. Four bags contain coloured counters. The bags are labelled A, B, C and D. The contents of each of the 4 bags are shown below.


Jenny is asked to take 1 counter from each bag without looking into the bag. From which bag is she most likely to take a blue counter? Write your answer $\mathbf{A}, \mathbf{B}, \mathbf{C}$ or $\mathbf{D}$ in the space below.

Bag $\qquad$
21. Look at the menu below.

| MENU |  |
| :--- | ---: |
| Fish $£ 3.25$ |  |
| Chips |  |

Calculate the cost of $\mathbf{2}$ fish and $\mathbf{3}$ portions of chips. Write your answer in the space below.
£ $\qquad$

## Page 8

22. Look at the function machine below.

Starting number


Answer


Now look at the two function machines below. The answer is missing in function machine (a) and the starting number is missing in function machine (b). Complete the two function machines below by writing the correct number in the blank arrow.
Starting number
(a)



Answer


Answer


Starting number
(b)



Do not write in this column
23. Look at the number below

### 86.235

What is the value of the $\mathbf{3}$ in this number? Tick $\checkmark$ the correct answer.

3 hundreds $\square$ 3 tenths

3 tens3 hundredths

3 thousandths $\square$

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

## Text Messaging

SMS language, also known as textspeak, is a term for the (line 1) abbreviations and slang most commonly used in mobile phone text messaging, though its use is common on the Internet, including e-mail and instant messaging.
This language for sending and recieving text messages is becoming more common, Many people still claim not to understand a word thats being written.
Websites are now providing text translators for confused parents, as the older generation tries to keep up with today's technologically advanced youth.
Many parents are worried about their children's poor literacy as a result of hours spent in front of a computer or communicating via text on mobiles.
Scottish examinations where criticised recently for accepting answers given in text message language, provided they were correct and showed understanding.
What is the world coming to. There must be an effort made, on the part of educators and parents alike, to encourage children in their use of standard English.
24. Each line is numbered. 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 3

line 7

line 9

line 14 $\square$

## Page 10

25. A question mark is needed instead of a full stop in one line of the passage. Tick $\square$ the number of the line where the question mark is needed.
line 4
line 10
line 16
line 17 $\square$
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 1 $\square$
line 3 $\square$
line 6 $\square$
line 9 $\square$
27. There is a spelling error in one of the lines. Tick $\checkmark$ the number of the line containing the spelling error.
line 5
line 8
line 12

line 13 $\square$

## Page 11

28. A word has been used incorrectly in the passage. Tick $\checkmark$ the number of the line where the error was made.
line 9 $\square$
line 11 $\square$
line 14 $\square$
line 15

Do not write in this column

29. An athlete takes 9 minutes to run 3000 metres at a steady speed. How long would she take to run 1 kilometre at the same steady speed? Write your answer in the space below.
$\qquad$ minutes
30. Roseagh is a member of a gym. It costs her $£ 19.50$ each month. How much in total does she pay to the gym in $\mathbf{1}$ year? Write your answer in the space below.
$£$ $\qquad$
31. The temperature at an airport is recorded every 4 hours for a 24 hour period. The results are shown on the graph below.


What is the difference between the highest and lowest temperature recorded? Write your answer in the space below.
$\qquad$ ${ }^{0} \mathrm{C}$
32. William thinks of 2 consecutive numbers. When he adds the numbers he gets $\mathbf{1 9}$. When he multiplies the numbers he gets $\mathbf{9 0}$. What are the two numbers William thinks of? Write your answers in the spaces below.
$\qquad$
33. Barra went on holiday last summer. He spent $\mathbf{3 5}$ minutes getting to the airport from his home. He then spent 1 hour at the airport before his flight. The flight lasted for $\mathbf{2} \frac{1}{\mathbf{2}}$ hours. Barra was at his holiday hotel $\mathbf{5 0}$ minutes after landing at the airport. How long did it take him in total to get from his home to his hotel? Write your answer in the spaces below.
$\qquad$ hours $\qquad$ minutes
34. Use the information in the first statement below to complete the other statement. Write your answer in the space below.
$1 / 5$ of $\mathbf{c}=8$
$50 \%$ of $\mathbf{c}=$
35. Look at the right-angled triangle below.


Find the perimeter of the triangle. Write your answer in the space below.

## Page 14

36. Here are $\mathbf{5}$ fractions:

Do not write in this column
$5 / 6 \quad 7 / 9 \quad 29 / 36 \quad 7 / 12 \quad 13 / 18$

Which is the smallest fraction? Write your answer in the space below.

## Swift Things are Beautiful

Swift things are beautiful:
Swallows and deer, And lightning that falls, Bright-veined and clear, Rivers and meteors, Wind in the wheat, The strong-withered horse, The runner's sure feet.

And slow things are beautiful:
The closing of day,
The pause of a wave
That curves downward to spray,
The ember that crumbles,
The opening flower,
And the ox that moves on
In the quiet of power.

## Elizabeth Coatsworth

37. Only one of the following sentences is true. Based on your reading of the poem, tick $\square$ the true sentence.

The poet thinks that only swift things are beautiful.
The poet describes the opening of a flower as slow.
The poet writes about the joy of life in the city.
38. The word $\mathbf{o x}$ is used in verse two of the poem. The plural of $\mathbf{o x}$ is oxen. Write the plurals of the following words in the spaces below. The first one has been done for you. Be careful with your spelling.
horse horses
deer
monkey
sheep
39. Look at the four phrases below. The phrases all appear in the poem. Tick $\checkmark$ the phrase closest in meaning to the words:

## small pieces of wood or coal burning in a fire.

Lightning that falls

Bright-veined and clear

The ember that crumbles

In the quiet of power
40. The poem refers to sure feet. Who or what has sure feet? Tick $\sqrt{ }$ the correct answer below.
the deer

the ox
the runner
the horse $\square$
41. Tick $\sqrt{ }$ the statement below that best describes the poem.

Swift Things are Beautiful is
a poem about the beauty found in nature.

a poem about really beautiful animals.
a poem about the changing weather. $\square$

## Page 17

42. Swift and slow are opposites. Find the word opposite in meaning to each of the words below. Write your answer in the space provided. The answers all appear in the poem.
ugly $\qquad$
uncertain $\qquad$
upward

43. The four phrases below appear in the poem. Tick $\sqrt{ }$ the phrase which is closest in meaning to the word evening.

Lightning that falls $\square$

The closing of day $\square$

The pause of a wave


The quiet of power $\square$

Page 18
44. The figure below shows 4 lines $\mathbf{a}, \mathbf{b}, \mathbf{c}$, and $\mathbf{d}$.


Tick $\checkmark$ each of the statements below true or false.

True False
Line $\mathbf{a}$ is parallel to line $\mathbf{b}$
Line $\mathbf{c}$ is parallel to line $\mathbf{d}$

Line a is perpendicular to line $\mathbf{c}$

Line a is perpendicular to line $\mathbf{d}$
$\square$


$\square$
45. A square number can be added to a prime number to make 39. There are two ways of doing this. One of the ways is given below:
$36+3=39$

What other square number can be added to a prime number to give 39 ? Write your answer in the boxes below.
$\square$
46. Look at the quadrilateral below.


The angles of the quadrilateral are $\mathbf{9 8}^{\mathbf{0}}, \mathbf{1 4 3}^{\mathbf{0}}, \mathbf{7 2}^{\mathbf{0}}$ and $\mathbf{s}$. Work out the size of the angle $\mathbf{s}$. Write your answer in the space below.
$\qquad$ o
47. Simon played a computer game. The computer game recorded his score each time he played it.

He played the game 9 times.
His mean (average) score was 12
The range of his scores was 10
His highest score was 16
What was Simon's lowest score? Write your answer in the space below.
$\qquad$
48. What was Simon's total score for the 9 games he played? Write your answer in the space below.
49. Look at the $\mathbf{4}$ numbers below.
0.11977
1.1977
11.977
119.77

The answer to the calculation below is one of these 4 numbers.
Write the correct number in the space below.
$1197.7 \div 100=$ $\qquad$
50. A piece of glass is one millimetre thick.

Look at the $\mathbf{4}$ statements below. One of these statements is correct. Tick $\nabla$ the correct statement.

The thickness of the glass is one tenth of a metre The thickness of the glass is one hundredth of a metre The thickness of the glass is one tenth of a centimetre The thickness of the glass is one hundredth of a centimetre
51. Look at the plan of a garden below. In one corner of the garden is a children's "play zone". The garden and the play zone are both rectangular. The ground in the play zone is made of soft plastic material. The part of the garden outside the play zone is covered with grass.


On the plan: $\mathbf{1}$ centimetre represents $\mathbf{3}$ metres.
(a) Find the area of the play zone on the plan. Write your answer in the space below.
$\qquad$ $\mathrm{cm}^{2}$
(b) Find the actual perimeter of the part of the garden which is covered with grass. Write your answer in the space below.

## The Fox in Winter

"Hey!" Dave was calling her from the beach below, and she climbed down to him. Beyond them was a stretch of massive boulders, fallen in times past from the cliff face, and they clambered over them, leaping from rock to rock. The waves surged forward, rushing between the rocks and splashing over the top. The force of the water made Fran feel dizzy, if she looked at it.

They leaped down to a small beach. The tide had just cleared it, and there was not a mark on the smooth stretch of sand. They ran across it, and turned to look back at their two sets of footprints. No holiday-makers ever found their way here.

Before them stood the arched mouth of the cave, as big as a chapel. The tide had built up the sand across the entrance, trapping a large pool; sunlight reflected from the surface struck the roof of the cave, so that a shimmering light played over the stone.

They waded through. As they broke the surface, the light on the roof shattered; it danced frantically until they reached the sand beyond, and then gradually it settled down. A few drips of water fell from above, and the chill of the cavern struck them.

The rocks rising out of the sandy floor, with smaller pools around them, were covered with shiny seaweed. Mr Trelor once said that this was laver; they used to boil it and eat it as a vegetable. She scraped a sample into a plastic bag.

## John Branfield

52. Who is exploring the cave? Look at the answers below and tick $\square$ the best answer.

Fran and Mr Trelor $\square$
Dave and Mr Trelor


Fran and Dave


Fran, Dave and Mr Trelor $\square$
53. Look at paragraph one. Find the phrase of three or four words which tells us that the boulders have been there for a long time. Write the phrase in the space below.
$\qquad$
54. Only one of the four sentences below is true. Based on your reading of the passage, tick $\square$ the true sentence.

The beach is a busy tourist spot.


It is a bright and sunny day. $\square$

The entrance to the cave is small. $\square$

The sea is calm and still. $\square$
55. A simile is a comparison of one thing with another using the words 'as' or 'like'. For example: The children were playful like kittens. There is a simile in one sentence of the passage. Write the sentence containing the simile in the space below.
$\qquad$
$\qquad$
56. Find the word closest in meaning to each of the words below. The three words you're searching for are in paragraph one of the passage. Write your answers in the spaces below.
big $\qquad$
jumping $\qquad$
giddy $\qquad$
57. Look at paragraph four of the passage. Now look at the four sentences below. One of the sentences is true. Tick $\sqrt{ }$ the true sentence.

A light bulb on the roof of the cave shatters.
Dave and Fran begin to dance in the cave.
Dave and Fran wade through a pool of light.
The pool of water reflects light onto the roof.
58. The word frantically is used in the passage. This is an adverb.

Write the adverb for each of the following words below in the space provided. Be careful with your spelling. The first one has been done for you.

| happy | happily |
| :--- | :--- |
| slow |  |
| funny |  |

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