# 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	
Your Assessment Centre	
Your Date of Birth	

#### Answer all 58 questions in this booklet

		TO BE F 1 THE P		
N	MATE	HEM A	ATIC	S
Page	Marks	Score	Che	ck
1	(4)			
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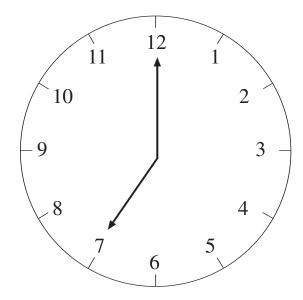
1.	Look at the 2 calculations below. Complete each calculation by finding the missing number. Write your answers in the spaces below.	Do not write in this column
	(a) $\_\_$ + 156 = 425	
	<b>(b)</b> $7 \times _{} = 952$	
2.	The temperature in the <b>fridge</b> section of a fridge-freezer is <b>5</b> °C. The temperature in the <b>freezer</b> section is <b>23</b> °C <b>lower</b> . What is the temperature in the freezer section? Write your answer in the space below.	
3.	The series of patterns below is made using a <b>mixture</b> of <b>white</b> and shaded square tiles. <b>Pattern 1</b> contains <b>4 tiles</b> . It has <b>two white</b> and <b>two shaded</b> tiles.	
	Pattern 1 Pattern 2 Pattern 3	
	If this series of patterns is continued, what is the <b>total</b> number of tiles in <b>Pattern 6</b> ? Write your answer in the space below.	
	tiles	
4.	Another pattern in the same series has <b>11 shaded</b> tiles. What is the total number of tiles in this pattern? Write your answer in the space below.	
		1 1

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.

Do not write in this column

%

**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.

- 7. A film on TV lasts for **100 minutes**. It **finishes** at **0015**. 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 **2 missing numbers** in Mark's sequence below. Write your answers in the spaces provided.

\_\_\_\_\_, 386, 194, \_\_\_\_\_, 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

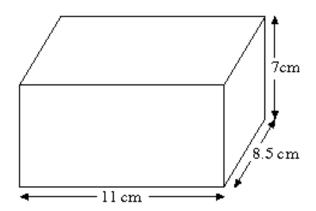
		rds in verse for	•	ery upset. Wha upset? Write the	-	
	different r		plete the sente	and <b>its</b> sound the nces below corre	same but have ectly by circling	
		ol. In particular		em about a boy interesting as it t		
		d in verse six late space below.		neaning as <b>respo</b>	nded? Write the	
	poem. Ti		et box to show	atmosphere are whether each on adjective.		
		noun	verb	adverb	adjective	
timid	lly					
new						
pursu						
atmo	sphere					

GO STRAIGHT TO PAGE 5

(5)

14.	of the verbs in the	of four verbs below. Write the present the spaces below. Be careful with your sbeen done for you.		Do not write in this column
	swung	swing		
	hung			
	grinned			
	breathed			
15.		e poem, only two of the statements belocorrect statements.	ow are <b>correct</b> .	
	The boy is frigh	atened because		
	he is new to the	school and everything is unfamiliar.		
	there is a lot of r	noise and confusion in the corridor.		
	he isn't good at a	anything related to mathematics.		
	there is a lot of r	noise and confusion in the cloakroom.		
		CO STRAIGHT TO BACE (		(4)
		GO STRAIGHT TO PAGE 6		\ <del>'</del> '

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.

\_\_\_\_

17. What is the **area** of the **largest face** of the cuboid? Write your answer in the space below.

\_\_\_\_\_ cm<sup>2</sup>

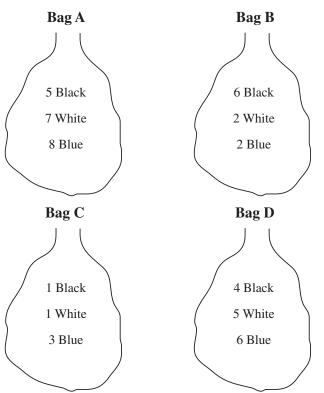
**18.** What is the **volume** of the cuboid? Write your answer in the space below.

\_\_\_\_\_cm<sup>3</sup>

19. How many quarter-litre glasses can be filled from a container which holds 12.5 litres of fruit juice? Write your answer in the space below.

\_

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 A, B, C or D in the space below.

Bag \_\_\_\_\_

**21.** Look at the menu below.

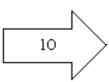


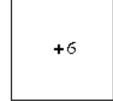
Calculate the cost of **2 fish** and **3 portions of chips**. Write your answer in the space below.

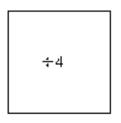
£ \_\_\_\_\_

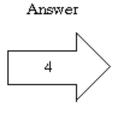
#### **22.** Look at the function machine below.

Starting number





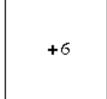


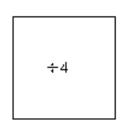


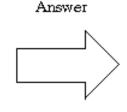
Now look at the two function machines below. The **answer** is **missing** in function machine (a) and the **starting number** is **missing** in function machine (b). Complete the two function machines below by writing the **correct number in the blank arrow**.

Starting number





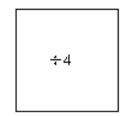


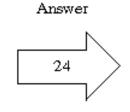


Starting number









#### 23. Look at the number below

86.235

What is the value of the 3 in this number? Tick  $\square$  the correct answer.

- 3 hundreds
- 3 tenths

3 tens

- 3 hundredths

3 units

3 thousandths

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

# Do not write in this column

# **Text Messaging**

SMS	language, also kno	own as textspeak, is a term for the	(line 1)
abbre	viations and slang	most commonly used in mobile phone	(line 2)
text n	nessaging, though	its use is common on the Internet,	(line 3)
includ	ding e-mail and ins	stant messaging.	(line 4)
This 1	anguage for sending	ng and recieving text messages is	(line 5)
becon	ning more common	n, Many people still claim not to	(line 6)
under	stand a word thats	being written.	(line 7)
Webs	ites are now provid	ding text translators for confused	(line 8)
paren	ts, as the older gen	neration tries to keep up with	(line 9)
today	's technologically	advanced youth.	(line 10)
Many	parents are worrie	ed about their children's poor	(line 11)
literac	ey as a result of ho	ours spent in front of a	(line 12)
comp	uter or communica	ating via text on mobiles.	(line 13)
Scotti	sh examinations w	here criticised recently for accepting	(line 14)
answe	ers given in text m	essage language, provided they were	(line 15)
correc	et and showed und	erstanding.	(line 16)
What	is the world comin	ng to. There must be an effort made, on the	(line 17)
part o	of educators and pa	rents alike, to encourage children in	(line 18)
their use of standard English.			
24.		pered. There is an apostrophe missing from o age. Tick $\square$ the number of the line containing ssing apostrophe.	
	line 3		
	line 7		
	line 9		
	line 14		

(1)

25.	_	is needed instead of a full stop in one line of the the number of the line where the question mark is	Do not in this	t write column
	line 4			
	line 10			
	line 16			
	line 17			
26.	stop rather than a	passage a comma has been used incorrectly. A full comma should have been used. Tick ✓ the number of this error was made.		
	line 1			
	line 3			
	line 6			
	line 9			
27.	There is a spelling line containing the	g error in one of the lines. Tick the number of the spelling error.		
	line 5			
	line 8			
	line 12			
	line 13			
		GO STRAIGHT TO PAGE 11	(3	)

		GO STRAIGHT TO PAGE 12	(1	.)
	line 15			
	line 14			
	line 11			
	line 9			
<b></b> 0•	the line where the	e error was made.	in this o	column
28.	A word has been	used incorrectly in the passage. Tick  the number of	Do not	write

<b>29.</b>	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.

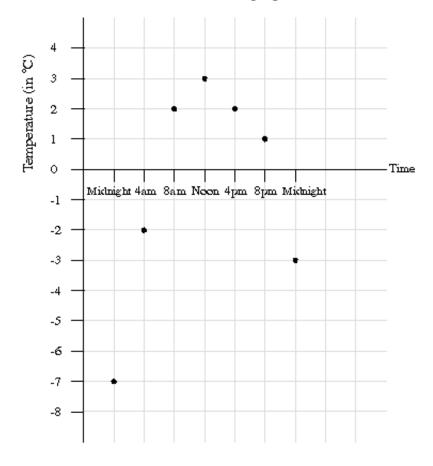
Do not write in this column

\_\_\_\_\_ 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 1 year? Write your answer in the space below.

£ \_\_\_\_\_

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.

32. William thinks of 2 **consecutive** numbers. When he **adds** the numbers he gets 19. When he **multiplies** the numbers he gets 90. What are the two numbers William thinks of? Write your answers in the spaces below.

Do not write in this column

33. Barra went on holiday last summer. He spent 35 minutes getting to the airport from his home. He then spent 1 hour at the airport before his flight. The flight lasted for 2½ hours. Barra was at his holiday hotel 50 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.

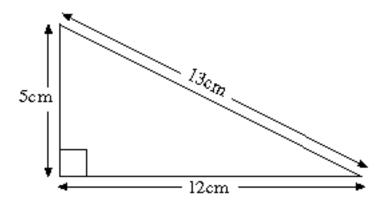
\_\_\_\_\_ hours \_\_\_\_ minutes

**34.** Use the information in the **first** statement below to **complete** the **other** statement. Write your answer in the space below.

$$^{1}/_{5}$$
 of **c** = 8

50% of  $\mathbf{c} = \underline{\phantom{a}}$ 

**35.** Look at the **right-angled triangle** below.



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

\_\_\_\_\_ cm

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

\_\_\_\_\_ cm<sup>2</sup>

36.	Here	are	5	frac	rtion	2.
JU.	11010	arc	J	II av	uuu	<b>D</b> .

<sup>5</sup> / <sub>6</sub>	7 <sub>/9</sub>	<sup>29</sup> / <sub>36</sub>	$^{7}/_{12}$	13 <sub>/18</sub>
_	_			

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

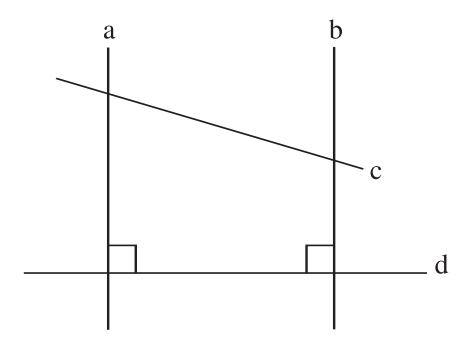
(1)

Swif	ft Things are Beautiful		ot write
Swal And Brigh Rive Wind The a And The a That	t things are beautiful: lows and deer, lightning that falls, ht-veined and clear, rs and meteors, d in the wheat, strong-withered horse, runner's sure feet.  slow things are beautiful: closing of day, pause of a wave curves downward to spray,	in this	column
The And	ember that crumbles, opening flower, the ox that moves on e quiet of power.		
	Elizabeth Coatsworth		
37.	Only <b>one</b> of the following sentences is true. <b>Based on your reading of the poem</b> , tick the <b>true</b> 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 ox is used in verse two of the poem. The plural of ox 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	('	3)
	GO STRAIGHT TO PAGE 16	(.	3)

39.	Look at the <b>four phrases</b> below. The phrases all appear in the poem. Tick $\square$ the phrase <b>closest in meaning</b> to the words:		t write column
	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 <b>sure feet</b> . <b>Who or what</b> has sure feet? Tick ✓ the correct answer below.		
	the deer		
	the ox		
	the runner		
	the horse		
41.	Tick ✓ the statement below that <b>best</b> 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.		
	GO STRAIGHT TO PAGE 17	(3	3)

42.	<b>Swift</b> and <b>slow</b> are opposites. Find the word <b>opposite</b> in meaning to each of the words below. Write your answer in the space provided. The answers <b>all appear in the poem</b> .			rite imn
	ugly			
	uncertain			
	upward			
43.	The four phrases below closest in meaning to the	appear in the poem. Tick $\checkmark$ the phrase which is e word <b>evening</b> .		
	Lightning that falls			
	The closing of day			
	The pause of a wave			
	The quiet of power			
	GO S	TRAIGHT TO PAGE 18	(3)	

44. The figure below shows 4 lines a, b, c, and d.



True

**False** 

Tick ✓ each of the statements below **true** or **false**.

Line **a** is parallel to line **b**Line **c** is parallel to line **d**Line **a** is perpendicular to line **c**Line **a** is perpendicular to line **d** 

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:

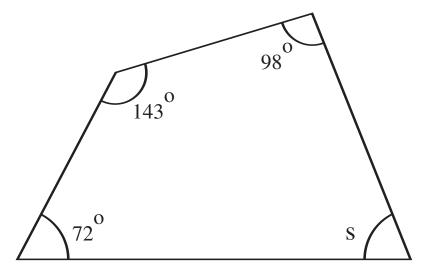
$$36 + 3 = 39$$

What **other** square number can be added to a prime number to give 39? Write your answer in the boxes below.

	+		=	39
--	---	--	---	----

(2)

**46.** Look at the quadrilateral below.



The angles of the quadrilateral are 98°, 143°, 72° and s. Work out the size of the angle s. Write your answer in the space below.

**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.

\_\_\_\_

**48.** What was Simon's **total score** for the 9 games he played? Write your answer in the space below.

\_\_\_\_\_

(3)

Do not write

49.	Look at the 4 numbers below.	Do not write in this column
	0.11977 1.1977 11.977 119.77	
	The answer to the <b>calculation below</b> is one of these 4 numbers. Write the correct number in the space below.	
	1197.7 ÷ 100 =	
50.	A piece of glass is one millimetre thick.	
	Look at the <b>4 statements</b> below. <b>One</b> of these statements is <b>correct</b> . Tick $\square$ 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 <b>plan</b> of a garden below. In one corner of the garden is a children's " <b>play zone</b> ". The garden and the play zone are both <b>rectangular</b> . The ground in the play zone is made of soft plastic material. The part of the garden <b>outside the play zone</b> is covered with <b>grass</b> .  Grass  Play Zone  Play Zone  On the plan: 1 <b>centimetre represents 3 metres</b> .	
(a)	Find the <b>area</b> of the play zone <b>on the plan</b> . Write your answer in the space below.	
	- cm <sup>2</sup>	
(b)	Find the <b>actual perimeter</b> of the <b>part</b> of the garden which is <b>covered with grass.</b> Write your answer in the space below.	
	metres	
	GO STRAIGHT TO PAGE 21	(3)

#### The Fox in Winter

limbed down to

n times past from

"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

(1)

52.	Who is exploring the cave? best answer.	Look at the answers below and tick ✓ the
	Fran and Mr Trelor	
	Dave and Mr Trelor	
	Fran and Dave	
	Fran, Dave and Mr Trelor	

**GO STRAIGHT TO PAGE 22** 

<b>3.</b>	Look at <b>paragraph one</b> . Find the phrase of <b>three or four words</b> which tells us that the boulders <b>have been there for a long time</b> . Write the phrase in the space below.	Do not in this co	
ļ <b>.</b>	Only one of the four sentences below is true. Based on your reading of the passage, tick the true sentence.		
	The beach is a busy tourist spot.		
	It is a bright and sunny day.		
	The entrance to the cave is small.		
	The sea is calm and still.		
•	Find the <b>word closest in meaning</b> to each of the words below. The		
	three words you're searching for are in <b>paragraph one</b> of the passage. Write your answers in the spaces below.		
	big		
	jumping		
	giddy		-:
			_
	GO STRAIGHT TO PAGE 23	(5)	)

57.		raph four of the passage. Now look at the four w. One of the sentences is true. Tick $\square$ the true sentence.		ot write column		
	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 wa	ater reflects light onto the roof.				
58.	Write the adve	tically is used in the passage. This is an adverb.  The for each of the following words below in the space careful with your spelling. The first one has been done				
	happy	happily				
	slow					
	funny			:		

(3)







