

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

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General Certificate of Secondary Education
November 2006



**MATHEMATICS (MODULAR) (SPECIFICATION B)
Module 1 Intermediate Tier Section A**

33001/IA

Monday 13 November 2006 1.30 pm to 1.55 pm

<p>For this paper you must have:</p> <ul style="list-style-type: none"> • a calculator • mathematical instruments • a treasury tag 	
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For Examiner's Use			
Section A		Section B	
Number	Mark	Number	Mark
1		5	
2		6	
3		7	
4		8	
Total Section A			
Total Section B			
TOTAL			
Examiner's Initials			

Time allowed for Section A: 25 minutes

Instructions

- Use blue or black ink or ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- Use a calculator where appropriate.
- Do all rough work in this book.
- This paper is divided into two sections: Section A and Section B.
- After the 25 minutes allowed for Section A, you must put your calculator on the floor under your seat. You will then be given Section B.
- When you have answered Section B you may work again on Section A but you may **not** use your calculator. It must remain on the floor under your seat.
- At the end of the examination tag Section A and Section B together with Section A on top.

Information

- The maximum mark for Section A is 20.
- The marks for questions are shown in brackets.
- You may ask for more answer paper and graph paper. These must be tagged securely to this answer book.

Advice

- In all calculations, show clearly how you work out your answer.

There are no questions printed on this page

Answer **all** questions in the spaces provided.

- 1 The number of visitors to a garden centre is recorded for 20 days.
The results are shown in the ordered stem-and-leaf diagram.



- (a) What was the greatest number of visitors to the garden centre on one day?

Answer (1 mark)

- (b) Calculate the median number of visitors to the garden centre.

.....
.....

Answer (2 marks)

3

Turn over for the next question

Turn over

- 2 A snack bar only sells crisps, chocolate bars, drinks and fruit. Every day Moneeb buys one item from the snack bar. The table shows the probabilities of Moneeb buying certain items.

Snack	Probability
Crisps	0.50
Chocolate bar	0.25
Drink	0.15
Fruit	

- (a) What is the probability that Moneeb buys a chocolate bar or a drink?

.....

Answer (2 marks)

- (b) What is the probability that Moneeb buys fruit?

.....

Answer (2 marks)

- 3 In January, 50 new members of a fitness club were timed when completing a set of exercises. Their results are summarised in the table.

January

Time, t (seconds)	Frequency
$100 \leq t < 120$	18
$120 \leq t < 140$	12
$140 \leq t < 160$	15
$160 \leq t < 180$	5

- (a) Calculate an estimate of the mean time.

.....

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.....

.....

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.....

Answer seconds (4 marks)

- (b) In February and March the same members were timed again completing the same set of exercises. Their results are summarised below.

	February	March
Mean time (seconds)	114	107
Range of times (seconds)	95	98

Write down **two** comparisons between the times for February and March.

Comparison 1

.....

.....

Comparison 2

.....

.....

(2 marks)

Turn over 

- 4 100 students recorded the number of hours in a week they spent using a computer. The table shows the results.

Number of hours	Frequency
0 to less than 5	17
5 to less than 10	23
10 to less than 15	18
15 to less than 20	16
20 to less than 25	15
25 to less than 30	11

- (a) Which class interval is the modal class?

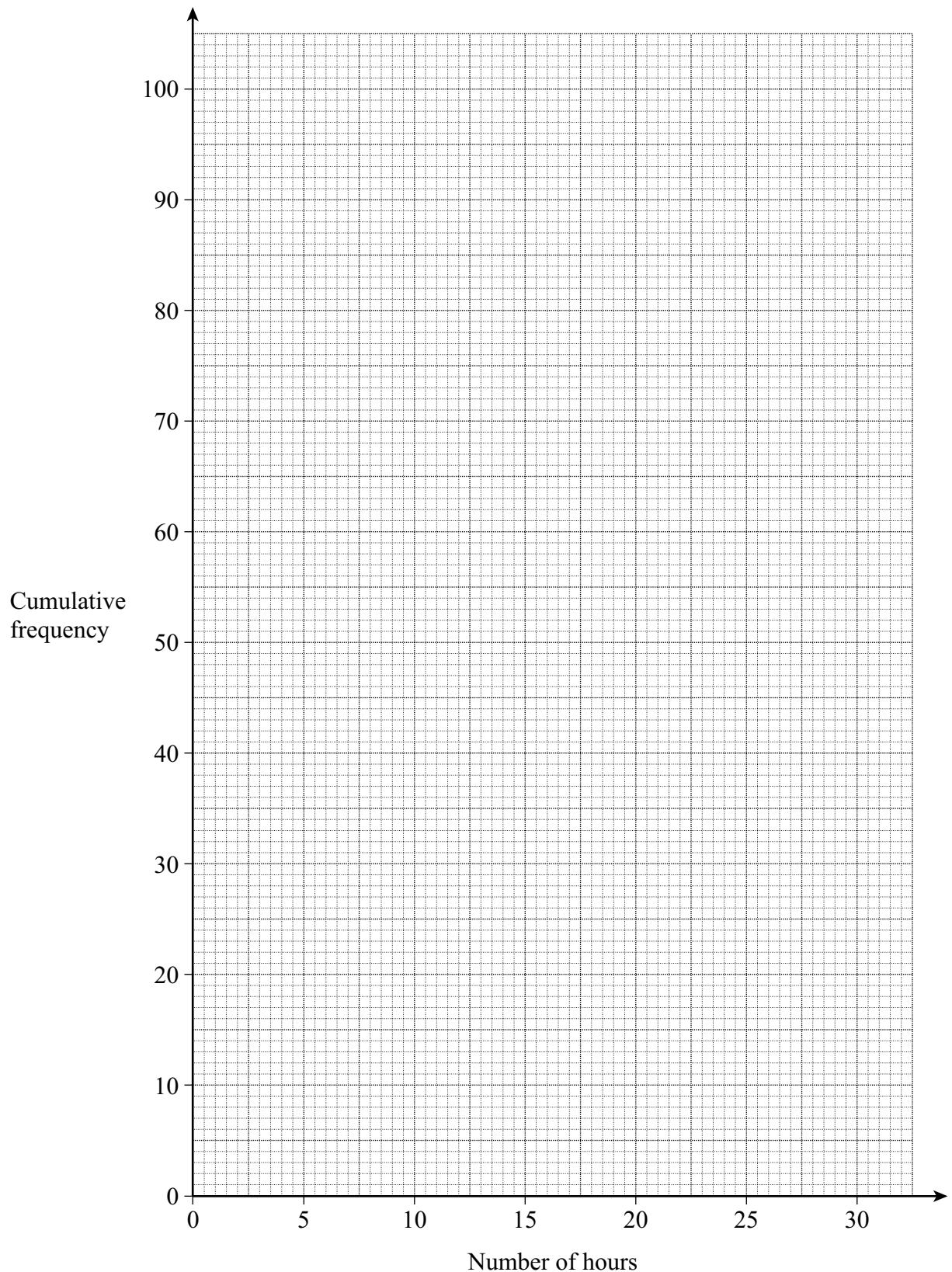
Answer (1 mark)

- (b) Complete the cumulative frequency table below.

Number of hours	Cumulative frequency
Less than 5	17
Less than 10	40
Less than 15	
Less than 20	
Less than 25	
Less than 30	

(1 mark)

- (c) Draw a cumulative frequency diagram on the grid opposite.



(3 marks)

- (d) Use your graph to estimate the number of students who spent more than 17 hours using a computer.

.....

Answer (2 marks)

END OF SECTION A

There are no questions printed on this page

Surname		Other Names	
Centre Number			Candidate Number
Candidate Signature			

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General Certificate of Secondary Education
November 2006



**MATHEMATICS (MODULAR) (SPECIFICATION B)
Module 1 Intermediate Tier Section B**

33001/IB

Monday 13 November 2006 2.00 pm to 2.25 pm

<p>For this paper you must have:</p> <ul style="list-style-type: none"> • mathematical instruments <p>You must not use a calculator.</p>	
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Time allowed for Section B: 25 minutes

Instructions

- Use blue or black ink or ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- Do all rough work in this book.
- You may **not** use your calculator in Section B. Your calculator must remain on the floor under your seat.
- When you have answered Section B you may work again on Section A but you may **not** use your calculator. It must remain on the floor under your seat.
- At the end of the examination tag Section A and Section B together with Section A on top.

Information

- The maximum mark for Section B is 20.
- The marks for questions are shown in brackets.
- You may ask for more answer paper and graph paper. These must be tagged securely to this answer book.

Advice

- In all calculations, show clearly how you work out your answer.

Answer **all** questions in the spaces provided.

- 5 (a) The total profit from a school play was £720.
The table shows how the profit was raised.

	Profit (£)
Tickets	320
Refreshments	250
Car park	150
Total	720

Draw and label a pie chart to show this information.

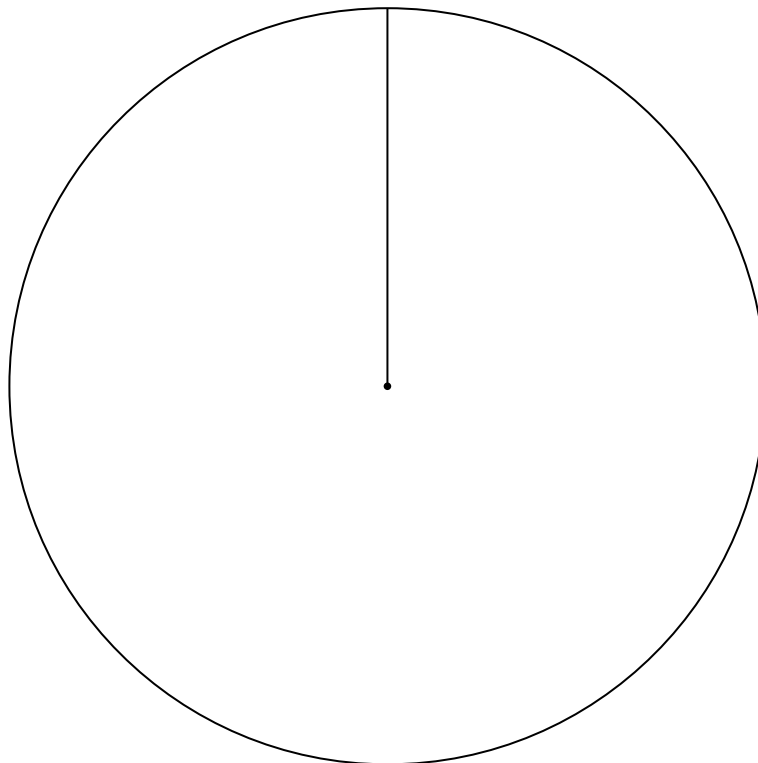
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Profit from school play



(4 marks)

- (b) A questionnaire was given to each person in the audience.
Here is one of the questions.

Did you think the play was	very good	good	or	fairly good?
Tick one box.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Explain why this is not suitable.

.....

.....

(1 mark)

5

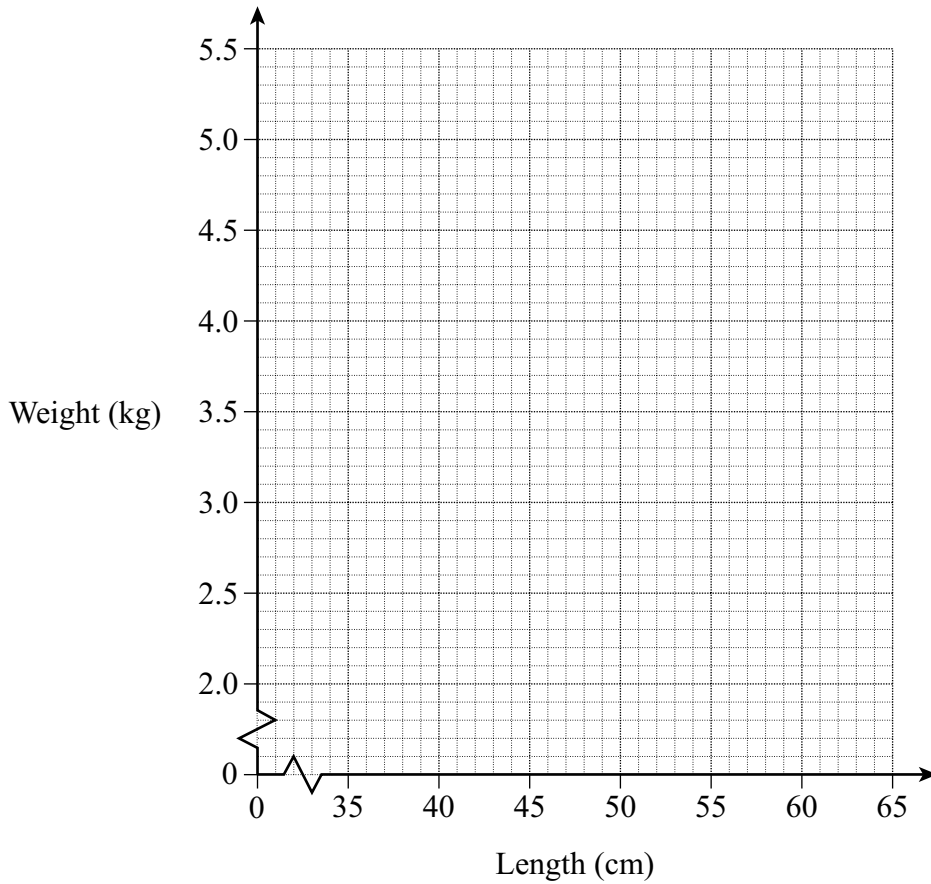
Turn over for the next question

Turn over 

6 The table shows the lengths, in centimetres (cm), and the weights, in kilograms (kg), of eight newborn babies.

Length (cm)	40	44	48	50	52	56	57	58
Weight (kg)	2.0	2.6	3.1	3.7	3.5	4.5	4.2	4.9

(a) Draw a scatter graph to show this information.



(2 marks)

(b) Draw a line of best fit on your scatter graph.

(1 mark)

(c) Describe the relationship shown by your scatter graph.

.....

(1 mark)

(d) Use your line of best fit to estimate the weight of a newborn baby whose length is 54 cm.

Answer kg (1 mark)

- 7 Phil wants to test if a six-sided dice is biased.
He rolls the dice 20 times.
Here are his results.

2 3 5 6 1 2 4 5 6 2
3 4 2 1 2 3 5 6 2 1

- (a) Complete the relative frequency table.

.....
.....
.....

Number	1	2	3	4	5	6
Relative frequency						

(2 marks)

- (b) Phil concludes that the dice is biased towards a number.

Write down the number that you think the dice is biased towards.
Explain your answer.

Number

Explanation

.....
.....

(1 mark)

- (c) Phil decides to roll the dice 100 times.
Calculate an estimate of the number of times that the dice will land on 4.

.....
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.....

Answer (2 marks)

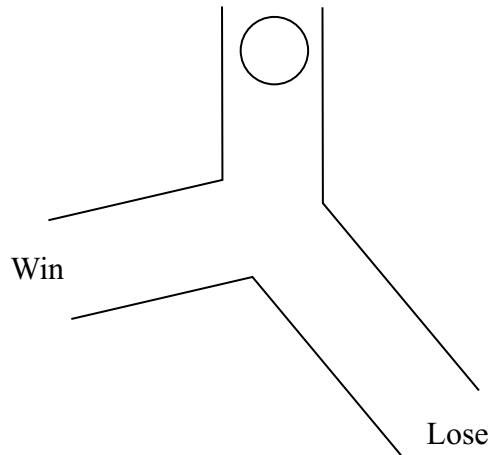
5

Turn over 

8 In a game a ball is dropped down a chute as shown in the diagram.

The ball falls into either the Win slot or the Lose slot.

The probability that the ball falls into the Win slot is always $\frac{3}{10}$



Andrea plays the game twice.

(a) Draw a tree diagram to show the outcomes and the probabilities.

(3 marks)

(b) Calculate the probability that Andrea loses both times.

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Answer (2 marks)

5

END OF QUESTIONS

There are no questions printed on this page

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

FIRST LANGUAGE ENGLISH

0500/01

Paper 1 Reading Passage

October/November 2006

1 hour 45 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

Dictionaries are **not** permitted.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **3** printed pages and **1** blank page.



Read the following passage carefully, and then answer all the questions.

In this passage the narrator returns to an old house in which he hid something several years before. He thinks that the house is empty and deserted.

THE HIDDEN BOX

I opened the iron gate and walked as softly as I could up the weed-tufted gravel drive. My mind was strangely empty. I felt no glow of pleasure and was unexcited at the prospect of becoming rich. I was occupied only with the mechanical task of finding a black box.

The front door was closed and set far back in a very deep porch. The wind and rain had whipped a coating of gritty dust against the panels and deep into the crack where the door opened, showing that it had been shut for years. Standing on a derelict flower-bed, I tried to push open the first window on the left. It yielded to my strength, raspily and stubbornly. I clambered through the opening and found myself, not at once in a room, but crawling along the deepest window-ledge I had ever seen. After I had jumped noisily down upon the floor, I looked up and the open window seemed very far away and much too small to have admitted me. 5 10

The room where I found myself was thick with dust, musty and empty of all furniture. Spiders had erected great stretchings of their webs about the fireplace. I made my way quickly to the hall, threw open the door of the room where the box was and paused on the threshold. It was a dark morning and the weather had stained the windows with blears of grey wash which kept the brightest part of the weak light from coming in. The far corner of the room was a blur of shadow. I had a sudden urge to have done with my task and be out of this house forever. I walked across the bare boards, knelt down in the corner and passed my hands about the floor in search of the loose board. To my surprise I found it easily. It was about two feet in length and rocked hollowly under my hand. I lifted it up, laid it aside and struck a match. I saw a black metal cash-box nestling dimly in the hole. I put my hand down and crooked a finger into the loose reclining handle, but the match suddenly flickered and went out and the handle of the box, which I had lifted up about an inch, slid heavily off my finger. Without stopping to light another match, I thrust my hand into the opening and, just when it should be closing about the box, something happened. 15 20 25

I cannot hope to describe what it was but it had frightened me very much. It was some change which came upon me or upon the room, indescribably subtle, yet momentous. It was as if the daylight had changed with unnatural suddenness, as if the temperature had altered greatly in an instant or as if the air had become twice as rare or twice as dense as it had been in the twinkling of an eye. Perhaps all of these, or other things, happened together, for all my senses were bewildered all at once and could give me no explanation. The fingers of my right hand, thrust in the opening in the floor, had closed mechanically, found nothing at all, and came up again empty. The box had gone! 30

I heard a cough behind me, soft and natural, yet more disturbing than any sound that could ever come upon the human ear. That I did not die of fright was due, I think, to two things: the fact that my senses were already disarranged and able to interpret to me only gradually what they had perceived, and also the fact that the utterance of the cough seemed to bring with it some more awful alteration in everything. It was as if the universe stood still for an instant, suspending the planets in their courses. I collapsed weakly from my kneeling backwards into a limp sitting-down position upon the floor. Sweat broke out on my brow and my eyes remained open for a long time without a wink, glazed and almost sightless. 35 40

In the darkest corner of the room, near the window, a man was sitting in a chair, eyeing me with a mild but unwavering interest.

- 1 (a) Which word in the first sentence of the passage shows that the narrator did not want to be heard? [1]
- (b) By referring to what the narrator says in paragraph 1, explain what might be found surprising about his state of mind. [3]
- (c) Give **two** words from the second paragraph which suggest that the window was difficult to open. [2]
- (d) Where was the cash box hidden, and how did the writer find it? [2]
- (e) Explain, using your own words, the change which the writer felt had come over the room and how this affected his state of mind in paragraph 4. [3]
- (f) Why do you think the writer uses the word 'stretchings' (line 13) to describe the spiders' webs? [2]
- (g) Re-read lines 9–25 (from 'After I had jumped noisily down...' to '...something happened'). Choose **three** details which the writer uses to suggest a sense of uneasiness and fear. Explain how each of these details suggests this sense. [6]
- (h) Explain, using your own words, what the writer means by 'my senses were already disarranged' (line 36). [2]
- (i) Explain, using your own words, what the writer means by 'with a mild but unwavering interest' (line 43). [2]
- (j) Re-read lines 1–19, and then write a summary of what you have learnt about the **appearance** of both the **outside and inside** of the house. (Write a paragraph of about 50-70 words.) [7]

[Total for Question 1: 30 marks]

- 2 Imagine that you are the man who is sitting watching from the corner of the room.

Write your story.

In your story:

- Explain why you are there.
- Describe what you have seen and heard.
- Explain what happens after the person searching for the box sees you.

You should base your ideas on what you have read in the passage, but do not copy from it.

You should write between 1 and 1½ sides, allowing for the size of your handwriting.

(Up to ten marks will be given for the content of your answer, and up to ten marks for the quality of your writing.)

[Total for Question 2: 20 marks]

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