'Now we are ready to start the test.

For the first group of questions you will have 5 seconds to work out each answer and write it down.'

1	What is forty-two multiplied by ten?
2	Look at the numbers on your answer sheet. Write down the number that is the mode.
3	How many centimetres are there in three-quarters of a metre?
4	Look at the expression on your answer sheet. Write it as simply as possible.
5	What number is eight less than minus four?
6	Write one and a half million in figures.
7	Round two point six nine four to one decimal place.
8	The length of a piece of string is fourteen centimetres to the nearest centimetre. What is the minimum length this piece of string could be?
9	What is the gradient of the line with equation y equals two x plus three?

'For the next group of questions you will have 10 seconds to work out each answer and write it down.'

10	Write down a factor of thirty-six that is greater than ten and less than twenty.
11	A train journey began at ten thirty-five am and ended at eleven fifteen am. How long was the train journey in minutes?
12	Drinks cost twenty-eight pence each. What is the greatest number of these drinks I can buy with one pound?
13	Put a cross on the grid to show the point with coordinates minus two, one.
14	The probability I will be late for school is one-twentieth. What is the probability that I will not be late for school?

'Now turn over your answer sheet.'

Key stage 3 mathematics 2005
Mental mathematics Test B

First name _____

Last name _____

School _____

Total marks ☐

Practice question

		38 12	

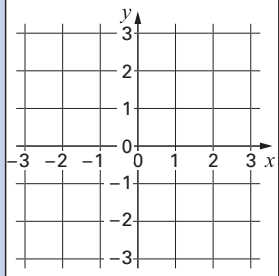
Time: 5 seconds

1		42	1
2	6 6 5 7 5 5 8		2
3	cm	$\frac{3}{4}$	3
4		$5a + 3a$	4
5		-4	5

Time: 5 seconds continued

6			6
7		2.694	7
8	cm	14 cm	8
9		$y = 2x + 3$	9

Time: 10 seconds

10		36	10
11	10:35 am 11:15 am minutes		11
12		28p £1	12
13			13
14		$\frac{1}{20}$	14

15	Look at the diagram on your answer sheet. What is the area of the rectangle?
16	How many thirds are there in two?
17	Look at the trapezium. Angle a is one hundred and ten degrees. What is the size of angle b?
18	Solve the equation, t plus three-fifths equals one.
19	Last month my telephone bill was thirty pounds. This month it is twenty per cent more. How much is this month's bill?
20	Look at the expression on your answer sheet. Its value is eighty-two. Write an expression using a and b with a value of forty-one.
21	What is three-quarters of a half?
22	Your answer sheet shows the nth term of a sequence. What is the sixth term in this sequence?
23	Work out the value of two to the power six divided by two squared.

'For the next group of questions you will have 15 seconds to work out each answer and write it down.'

24	Look at the two points on the square grid. Put one more cross on the grid so that the three points join to form an isosceles triangle.
25	Look at the calculation on your answer sheet. Write an approximate answer.
26	Ten out of thirty-six people said they ate toast for breakfast. What angle should represent this on a pie chart?
27	Look at the circle with radius three. One of the values below is its area. Put a ring round the correct value.
28	Look at the numbers on your answer sheet. Put them in order of size starting with the smallest.
29	Write two numbers with a mean of six and a range of four.
30	A cube has a volume of eight cubic centimetres. What is the volume of a cube with edges that are all twice as long?

'Put your pens down. The test is finished.'

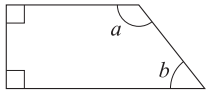
Time: 10 seconds continued

15

cm^2

16 $\frac{1}{3}$ 2

17



°

18 $t + \frac{3}{5} = 1$

19 £ £30 20%

20 $6a + 4b$ 82

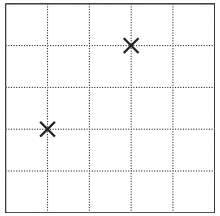
21 $\frac{3}{4}$ $\frac{1}{2}$

22 $\frac{1}{2}n(n+1)$

23 $\frac{2^6}{2^2}$

Time: 15 seconds

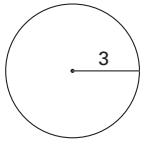
24



25 $\frac{52}{1.4 + 3.6}$

26 ° $\frac{10}{36}$

27



3π 6π 9π 12π 15π

28 0.4 $\frac{1}{5}$ 25%

....., ..., ...

29 ..... and 6 4

30 cm^3 $8\,cm^3$