

Ma

KEY STAGE

2

LEVELS

3–5

2004

This booklet contains **CONFIDENTIAL** test questions. It **MUST BE KEPT SECURE**. It should not be opened until the mental mathematics test is due to start on Thursday 13 May. Early opening, up to one hour before the test starts, is permissible only if papers are needed for administrative purposes.

Mathematics tests

# Mental mathematics test

Audiotape/CD transcript

This booklet contains a transcript of the key stage 2 mental mathematics test. It should be used **ONLY** in cases of audiotape or CD failure or for specific special arrangements outlined in the *2004 Teacher's guide* and in the *2004 Assessment and reporting arrangements* booklet for key stage 2.



2004



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# Notes for teacher-read version

## Instructions

In the event of an audiotape or CD failure, the teacher should follow the instructions on pages 2 and 5.

1. Children should have only pens or pencils. They should not have rubbers, rulers, calculators or any mathematical equipment. Access to paper for working out answers is **not allowed**.
2. Ensure that each child has an answer sheet. Tell the children to write their name and school in the box at the top of the answer sheet.
3. Ensure the children understand that:
  - they must complete the test on their own without copying or discussing questions with other children;
  - they will be told how long they have to answer each question and that the time given will increase from 5, to 10, to 15 seconds as the test progresses through the three sections;
  - for some of the questions, the information they will need is included in or beside the answer box on the pupil answer sheet;
  - they are not allowed to use a calculator or any other mathematical equipment;
  - if they want to change their answer, they should put a cross through their first answer. They are not allowed to rub out any answers;
  - they should answer as many questions as they can. If they find a question too difficult, they should put a cross in the answer box, and wait for the next question;
  - they should not write in the white boxes in the blue margins;
  - they will not be allowed to ask any questions once the test has started.
4. You must have access to a clock or watch that measures accurately in seconds.

Instructions continued on page 5

5. Read out the following script, using exactly these words:

*Listen carefully to the instructions I am going to give you. When I have finished reading them, I will answer any questions. However, you will not be able to ask any questions once the test has begun.*

*I will start by reading a practice question. Then I am going to ask you 20 questions for the test. On your sheet there is an answer box for each question, where you should write the answer to the question and nothing else. You should work out the answer to each question in your head, but you may jot things down outside the answer box if this helps you. Do not try to write down your calculations because this will waste time and you may miss the next question. For some of the questions, important information is already written down for you on the sheet.*

*I will read out each question twice. Listen carefully both times. You will then have time to work out your answer. If you cannot work out an answer, put a cross in the answer box. If you make a mistake, cross out the wrong answer and write the correct answer next to it. There are some easy and some harder questions, so don't be put off if you cannot answer a question.*

6. Stop and answer any questions that the children may have.

7. Read out the following:

*Here is the practice question to show you what to do.*

*I will read the question twice, and you will have five seconds to work out the answer and write it in the answer box.*

*What is ten times ten?*

Repeat the question.

*What is ten times ten?*

Wait five seconds (measured accurately using a clock or watch), then read out the following:

*Now put down your pen or pencil.*

8. Ensure that the children have correctly placed their answers to the practice question on their answer sheets. Remind the children that, for some questions, information is provided in or beside the answer box. When they are ready to begin the test, tell the children that you will not be able to answer any further questions, or interrupt the test, once you have started reading the questions.
9. The questions are given on page 3 of this booklet. The questions must be read out exactly as written. Start by stating the question number, then read each question twice before leaving the 5, 10 or 15 second response time. **These timings must be strictly adhered to.**
10. At the end of the test, tell the children to put down their pens or pencils, then collect their answer sheets.

## Test questions

*'Now we are ready to start the test. For this group of questions, you will have 5 seconds to work out each answer and write it down.'*

The questions	
1	How many hours are there in two days?
2	Subtract thirty-two from seventy.
3	What is thirty multiplied by seven?
4	Divide forty-eight by eight.
5	What is two-thirds of sixty-six?

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

6	Add together twenty-three, thirty-three and forty-three.
7	Look at the list on your answer sheet. It shows the times that buses leave the bus station. How many minutes are there between each bus?
8	Look at your answer sheet. Put a ring around the fraction which is equal to one-half.
9	A fruit pie costs fifty-five pence. What is the cost of three fruit pies?
10	Five times a number is two hundred. What is the number?
11	Look at your answer sheet. What fraction of the diagram is shaded?
12	How many metres are there in four and a half kilometres?
13	What temperature is twenty degrees lower than six degrees Celsius?
14	What is one point three multiplied by four?
15	What is seven point five divided by one hundred?

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

16	What is one thousand minus one hundred and ten?
17	What number is halfway between thirty and eighty?
18	Look at your answer sheet. Put a ring around the number which is a multiple of six.
19	A rectangle measures eleven centimetres by twenty centimetres. What is its area?
20	Look at your answer sheet. The diagram shows a regular hexagon. What is the size of angle $x$ ?

*'Now put down your pen or pencil. The test is finished.'*

# Key stage 2 mathematics 2004 mental mathematics test

First name ..... Last name .....

School .....

Total marks

## Practice question

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### Time: 5 seconds

<b>1</b>		hours
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<b>2</b>		70
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<b>3</b>		30
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<b>4</b>	
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<b>5</b>		66
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### Time: 10 seconds

<b>6</b>	
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<b>7</b>	<p style="text-align: center;">Bus times</p> <p style="text-align: center;">07:15</p> <p style="text-align: center;">07:35</p> <p style="text-align: center;">07:55</p> <p style="text-align: center;">08:15</p>
	minutes

<b>8</b>	$\frac{1}{20}$ $\frac{1}{100}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{5}{10}$
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<b>9</b>		55p
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<b>10</b>		5
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<b>11</b>	

<b>12</b>		m
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<b>13</b>		°C	6°C
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<b>14</b>		1.3
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<b>15</b>		7.5
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### Time: 15 seconds

<b>16</b>	
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<b>17</b>		30	80
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<b>18</b>	<table style="margin: auto;"> <tr> <td>100</td> <td>140</td> <td>260</td> </tr> <tr> <td>300</td> <td>340</td> <td></td> </tr> </table>	100	140	260	300	340	
100	140	260					
300	340						

<b>19</b>		cm <sup>2</sup>
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<b>20</b>	
	degrees

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Qualifications and Curriculum Authority  
83 Piccadilly  
London  
W1J 8QA

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