

# Ma

KEY STAGE

# 2

LEVELS

# 3-5

# 2006

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 11 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

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 2006 *Assessment and reporting arrangements* booklet for key stage 2.



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# Notes for teacher-read version

## Instructions

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

1. Pupils 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 pupil has an answer sheet. Tell the pupils to write their name and school in the box at the top of the answer sheet.
3. Ensure the pupils understand that:
  - they must complete the test on their own without copying or discussing questions with other pupils
  - 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. The test administrator must have access to a clock or watch that measures accurately in seconds.

Instructions continued on page 5

## 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             | What is one hundred and twenty add eighty?         |
| 2             | What is half of ninety pence?                      |
| 3             | How many sixes are there in thirty-six?            |
| 4             | What is double one point seven?                    |
| 5             | What number is one hundred less than ten thousand? |

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

|    |                                                                                                                           |
|----|---------------------------------------------------------------------------------------------------------------------------|
| 6  | Add three hundred and eight to four hundred and two.                                                                      |
| 7  | What is three times one hundred and fifty?                                                                                |
| 8  | I had one pound.<br>I bought two cartons of drink and got thirty pence change.<br>How much did each carton of drink cost? |
| 9  | How many millimetres are there in fifteen centimetres?                                                                    |
| 10 | Imagine a triangular prism.<br>How many faces does it have?                                                               |
| 11 | Add together two and a half and three and a half and four and a half.                                                     |
| 12 | What temperature is ten degrees lower than seven degrees Celsius?                                                         |
| 13 | A rectangle measures twelve centimetres by four centimetres.<br>What is its area?                                         |
| 14 | What fraction of two pounds is twenty pence?                                                                              |
| 15 | Divide nought point nine by one hundred.                                                                                  |

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

|    |                                                                                                             |
|----|-------------------------------------------------------------------------------------------------------------|
| 16 | Add together eight and seven, then multiply the result by four.                                             |
| 17 | Look at your answer sheet.<br>Put a ring around the smallest number.                                        |
| 18 | I think of a number, subtract ten and double the result.<br>The answer is forty-four.<br>What is my number? |
| 19 | One book costs one pound ninety-five pence.<br>How much do six books cost?                                  |
| 20 | In a group of forty-five children, there are twice as many boys as girls.<br>How many girls are there?      |

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

# Key stage 2 mathematics 2006 mental mathematics test

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

School .....

Total marks

## Practice question

|  |  |
|--|--|
|  |  |
|--|--|

|           |  |
|-----------|--|
| <b>10</b> |  |
|-----------|--|

|  |  |
|--|--|
|  |  |
|--|--|

## Time: 5 seconds

|          |  |    |  |
|----------|--|----|--|
| <b>1</b> |  | 80 |  |
|----------|--|----|--|

|           |  |
|-----------|--|
| <b>12</b> |  |
|-----------|--|

|  |  |
|--|--|
|  |  |
|--|--|

|          |   |     |  |
|----------|---|-----|--|
| <b>2</b> | p | 90p |  |
|----------|---|-----|--|

|           |                 |
|-----------|-----------------|
| <b>13</b> | cm <sup>2</sup> |
|-----------|-----------------|

|  |  |
|--|--|
|  |  |
|--|--|

|          |  |
|----------|--|
| <b>3</b> |  |
|----------|--|

|           |  |
|-----------|--|
| <b>14</b> |  |
|-----------|--|

|  |  |
|--|--|
|  |  |
|--|--|

|          |  |
|----------|--|
| <b>4</b> |  |
|----------|--|

|           |  |     |  |
|-----------|--|-----|--|
| <b>15</b> |  | 0.9 |  |
|-----------|--|-----|--|

|          |  |
|----------|--|
| <b>5</b> |  |
|----------|--|

## Time: 15 seconds

## Time: 10 seconds

|          |  |     |  |
|----------|--|-----|--|
| <b>6</b> |  | 308 |  |
|----------|--|-----|--|

|           |  |
|-----------|--|
| <b>16</b> |  |
|-----------|--|

|          |  |     |  |
|----------|--|-----|--|
| <b>7</b> |  | 150 |  |
|----------|--|-----|--|

|           |      |       |       |  |
|-----------|------|-------|-------|--|
| <b>17</b> | 0.7  | 0.077 | 0.707 |  |
|           | 0.77 | 7.007 |       |  |

|          |  |     |  |
|----------|--|-----|--|
| <b>8</b> |  | 30p |  |
|----------|--|-----|--|

|           |  |    |  |
|-----------|--|----|--|
| <b>18</b> |  | 44 |  |
|-----------|--|----|--|

|          |    |    |  |
|----------|----|----|--|
| <b>9</b> | mm | 15 |  |
|----------|----|----|--|

|           |   |       |  |
|-----------|---|-------|--|
| <b>19</b> | £ | £1.95 |  |
|-----------|---|-------|--|

|           |       |    |  |
|-----------|-------|----|--|
| <b>20</b> | girls | 45 |  |
|-----------|-------|----|--|

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 pupils 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 5 seconds to work out the answer and write it in the answer box.*

*What is ten less than thirty-three?*

Repeat the question.

*What is ten less than thirty-three?*

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 pupils have correctly placed their answers to the practice question on their answer sheets. Remind the pupils that, for some questions, information is provided in or beside the answer box. When they are ready to begin the test, tell the pupils 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 pupils to put down their pens or pencils, then collect their answer sheets.

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