

Ma

KEY STAGE

3

LOWER TIER  
TEST C

Mathematics tests

# Mental mathematics

Test C transcript

This booklet contains a transcript of the key stage 3 mental mathematics test C. It should be used **ONLY** in cases of CD failure or for specific special arrangements outlined in the 2009 *Key stage 3 test administrators' guide*.

2009

# Notes for use of transcript

## Instructions

In the event of 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 other 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

## Lower tier test C questions

'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 Write in figures the number eight hundred and one.
- 2 How many minutes are there in two hours?
- 3 What is twenty-six pounds fifty-eight pence rounded to the nearest pound?
- 4 What number do I need to add to sixty-three to make one hundred?
- 5 Multiply two hundred and six by ten.
- 6 How many faces does a triangular prism have?
- 7 I am thinking of a number. I call it  $b$ . I subtract two from my number. Write an expression to show the result.
- 8 Add eight to minus three.

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

- 9 The tally chart shows the number of silver and red cars a shop sold in one week. How many more red cars were sold than silver cars?
- 10 Look at the number line on your answer sheet. What number is the arrow pointing to?
- 11 A radio programme starts at six forty-five pm and lasts for forty-five minutes. At what time does the programme finish?
- 12 I am counting up in nought point twos. Two point three, two point five, two point seven, ... Write down the next two numbers.
- 13 Look at the number on your answer sheet. Round it to the nearest hundred.
- 14 The sequence of numbers on your answer sheet goes down in steps of four. Write the next two numbers in the sequence.
- 15 Look at the equation on your answer sheet. When  $a$  is thirty-four, what is the value of  $b$ ?
- 16 Look at the numbers on your answer sheet. Add them.

'Now turn over your answer sheet.'

## Pupil answer sheet

Key stage 3 mathematics 2009  
Mental mathematics Test C

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_

Total marks

Time: 5 seconds continued

|   |  |    |                      |
|---|--|----|----------------------|
| 8 |  | -3 | <input type="text"/> |
|---|--|----|----------------------|

Time: 10 seconds

|                      |        |  |  |
|----------------------|--------|--|--|
| 9                    | Silver |  |  |
|                      | Red    |  |  |
| <input type="text"/> |        |  |  |

|    |  |                      |
|----|--|----------------------|
| 10 |  | <input type="text"/> |
|----|--|----------------------|

|    |        |            |                      |
|----|--------|------------|----------------------|
| 11 | 6.45pm | 45 minutes | <input type="text"/> |
|    |        | pm         |                      |

|    |     |     |     |                      |
|----|-----|-----|-----|----------------------|
| 12 | 2.3 | 2.5 | 2.7 | <input type="text"/> |
|    |     |     |     |                      |

|    |  |      |                      |
|----|--|------|----------------------|
| 13 |  | 9343 | <input type="text"/> |
|----|--|------|----------------------|

|    |     |     |    |   |                      |
|----|-----|-----|----|---|----------------------|
| 14 | 16, | 12, | 8, | 4 | <input type="text"/> |
|    |     |     |    |   |                      |

|    |  |              |                      |
|----|--|--------------|----------------------|
| 15 |  | $a - b = 14$ | <input type="text"/> |
|----|--|--------------|----------------------|

|    |  |     |     |                      |
|----|--|-----|-----|----------------------|
| 16 |  | 2.6 | 0.8 | <input type="text"/> |
|----|--|-----|-----|----------------------|

Practice question

|  |    |                      |
|--|----|----------------------|
|  | 24 | <input type="text"/> |
|--|----|----------------------|

Time: 5 seconds

|   |                      |                      |
|---|----------------------|----------------------|
| 1 | <input type="text"/> | <input type="text"/> |
|---|----------------------|----------------------|

|   |         |                      |
|---|---------|----------------------|
| 2 | minutes | <input type="text"/> |
|---|---------|----------------------|

|   |   |        |                      |
|---|---|--------|----------------------|
| 3 | £ | £26.58 | <input type="text"/> |
|---|---|--------|----------------------|

|   |  |    |                      |
|---|--|----|----------------------|
| 4 |  | 63 | <input type="text"/> |
|---|--|----|----------------------|

|   |  |     |                      |
|---|--|-----|----------------------|
| 5 |  | 206 | <input type="text"/> |
|---|--|-----|----------------------|

|   |  |                      |                      |
|---|--|----------------------|----------------------|
| 6 |  | <input type="text"/> | <input type="text"/> |
|---|--|----------------------|----------------------|

|   |  |     |                      |
|---|--|-----|----------------------|
| 7 |  | $b$ | <input type="text"/> |
|---|--|-----|----------------------|

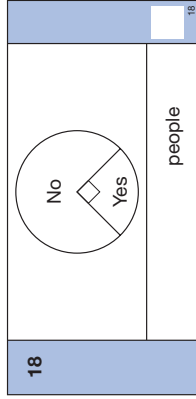
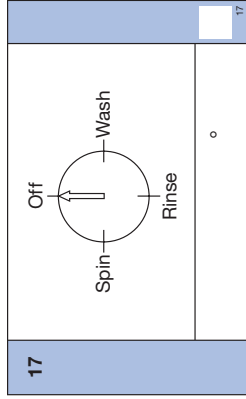
- 17 Look at the dial on your answer sheet. The arrow turns from 'off' to 'rinse'. Through how many degrees does the arrow turn?
- 18 One hundred people were asked whether they used a gym or not. The pie chart shows the results. How many people said no?
- 19 Halve the expression on your answer sheet.
- 20 Each side of a pentagon is eight centimetres long. What is its perimeter?
- 21 What is twenty per cent of fifty pounds?

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

- 22 Look at the number machine on your answer sheet. I put in the number two. What number should come out?
- 23 Paul was born on the first of August in nineteen ninety-eight. How old will he be on the first of August in two thousand and nine?
- 24 Your answer sheet shows how Ella spent all her pocket money one month. What percentage did she spend on clothes?
- 25 Lisa did a survey to find out the type of books pupils in her class preferred. The bar chart shows her results. How many more pupils chose story books than poetry books?
- 26 Look at the shaded triangle drawn on a centimetre square grid. What is the area of the triangle?
- 27 Your answer sheet shows the coins Jack has in his pocket. He is going to take a coin from his pocket at random. What is the probability he will take a two pence coin?
- 28 Look at the names of shapes on your answer sheet. Put a ring round the name of the shape that has only one pair of parallel sides.
- 29 Four point three multiplied by six equals twenty-five point eight. What does four point three multiplied by twelve equal?
- 30 Look at the numbers on your answer sheet. Put a ring round the number that is prime.

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

**Time: 10 seconds continued**



19

8pq

19

20

cm

8cm

20

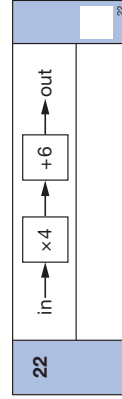
21

£

£50

21

**Time: 15 seconds**



23

2009

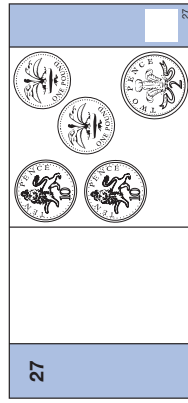
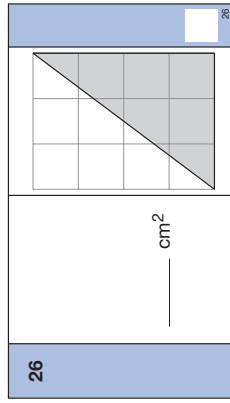
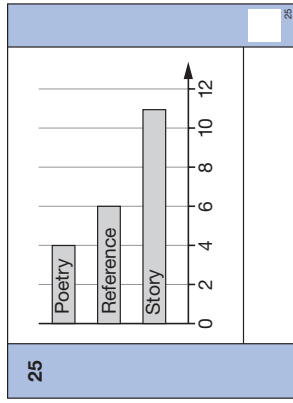
23

24

|           |     |
|-----------|-----|
| magazines | 25% |
| food      | 40% |
| clothes   | %   |

24

**Time: 15 seconds continued**



28

rectangle

rhombus

parallelogram

square

trapezium

28

29

4.3 x 6 = 25.8

29

30

21

23

25

27

30

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

*Listen carefully to the instructions I am going to give you. After I have finished reading them, there will be time for you to ask any questions you might have. 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 30 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.*

*Double the number on your answer sheet.*

Repeat the question.

*Double the number on your answer sheet.*

Wait 5 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 pages 3–4 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.

