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Ma

YEAR 7 PROGRESS

LEVELS 3–4

2007

Mathematics tests

Mental mathematics

Test transcript

THIS BOOKLET CONTAINS **CONFIDENTIAL** TEST QUESTIONS. IT **MUST BE KEPT SECURE**. IT SHOULD NOT BE OPENED UNTIL THE START OF THE MENTAL MATHEMATICS TEST, WHICH MUST TAKE PLACE DURING THE YEAR 7 PROGRESS TEST WEEK OF **MONDAY 14 MAY 2007 – FRIDAY 18 MAY 2007.**

This booklet contains a transcript of the year 7 Mental mathematics test. It should be used **ONLY** in the case of CD failure or for specific special arrangements outlined in the *2007 Assessment and reporting arrangements* booklet for key stage 3.

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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

Test 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 four hundred and seven.
2	What is twenty-one divided by three?
3	Subtract nineteen from forty-one.
4	Look at the equation on your answer sheet. What is the value of n?
5	How many millimetres are there in six centimetres?
6	What is eight multiplied by seven?

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

7	The table on your answer sheet shows the colours of some people's hair and eyes. Which person has brown hair and green eyes?
8	Add together seventy, ninety and thirty.
9	Look at the shape drawn on the square grid. How many lines of symmetry does it have?
10	In a pictogram, one circle represents four people. How many circles will represent twenty-eight people?

'Now turn over your answer sheet.'

Pupil answer sheet

Year 7 mathematics 2007

Mental mathematics test

First name _____

Last name _____

School _____

Total marks

Practice question

29

Time: 5 seconds

1

2

3 — 19 41

4 — $15 - n = 6$

5 — mm — 6cm

6 — 8 7

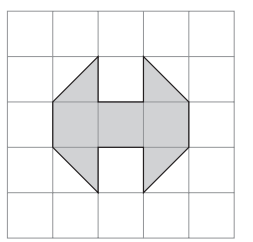
Time: 10 seconds

7

	Blue eyes	Green eyes
Blonde hair	Jack	Molly
Brown hair	Raj	Ali

8 — 70 90 30

9



10 — = 4 people

28 people

circles

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11	A pattern is made from red, blue and green squares. Thirty-five per cent of the squares are red. Twenty-five per cent of the squares are blue. What percentage of the squares are green?
12	The sequence of numbers on your answer sheet goes up in steps of one hundred. Write down the next two numbers in the sequence.
13	Look at the numbers on your answer sheet. What number is the mode?
14	What number is halfway between twenty and thirty-two?

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

15	Multiply five by seven and add nine.
16	If the tenth of October is a Wednesday, what day of the week is the nineteenth of October?
17	I buy two drinks at eighty pence each. I pay with a five pound note. How much change should I get?
18	Look at the shaded square drawn on the grid. On the grid, draw a different rectangle that has the same area as the square.
19	A tennis match started at two pm. It finished after one hundred and ten minutes. At what time did the tennis match finish?
20	The pupils in a class answered twenty maths questions. The bar chart shows their results. How many pupils scored more than half marks?

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

Time: 10 seconds continued

11 ____ % 35% 25% 11

12 3608, 3708, 3808, ... ____ , ____ 12

13 3 1 5 1 7 3 1 13

14 ____ 20 32 14

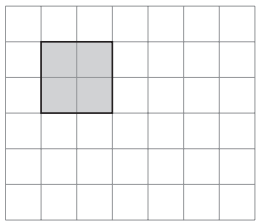
Time: 15 seconds

15 ____ 5 × 7 9 15

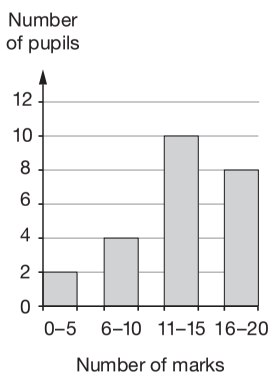
16 ____ 10th 19th 16

17 £ ____ 80p £5 17

Time: 15 seconds continued

18  18

19 ____ pm 2:00pm 19

20 

____ pupils 20

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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 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.

Add ten to the number on your answer sheet.

Repeat the question.

Add ten to 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.

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QCA/06/2813 (Pupil pack)
QCA/06/2810 (Mark scheme pack)
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