1. Administering the mental mathematics test

It is recommended that the mental mathematics test is administered after the written test, if both are administered on the same day. In these circumstances, allow a break of at least 15 minutes between them.

There is one mental mathematics test. It is a taped test consisting of a practice question and 20 timed questions. The tape has a running time of approximately 15 minutes. It starts with instructions to the children followed by the questions. There will be two opportunities for you to pause the tape. These will be indicated by a bleep. The first pause comes near the beginning of the tape, once the instructions have been given. This will allow clarification of any of the instructions not understood by the children. The second pause is after the practice question. After this second pause, the tape should be allowed to play without interruption.

The mental mathematics test is organised in two sections. Each section includes easy and more difficult questions, arranged so that the easier questions are at the beginning of the section. This means that there are a number of relatively difficult questions early in the test with some relatively easy questions later. Children should be made aware that questions will vary in difficulty.

Equipment

You will need:

- an audiotape cassette recorder; and
- an audiotape of the mental mathematics test.

Each child will need:

- a copy of the Year 4 mental mathematics test answer sheet (photocopiable from the final two pages in the *Teacher's guide* or available in multiple copies from QCA Publications); and
- a pen or pencil.

Please note:

Children 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 **but the children may jot things down outside the answer box on their answer sheets if this helps them**. They should be made aware that they must answer in the allocated time for each question and that recording extensive written working may slow down their responses.

Introducing the mental mathematics test

Ensure that each child has a copy of the mental mathematics test answer sheet. Tell the children to write their name and class in the box at the top of it.

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 seconds as the test progresses through the two sections;
- for some of the questions, the information they will need is included in or beside the answer box on the children's answer sheet;
- they are not allowed to use a calculator or any other mathematical equipment;
- they should work out the answer to each question in their head but they may jot things down outside the answer box if it will help them;
- 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 interrupt the test by asking any questions once the test has started; and
- they should not write in the white boxes in the margin.

Working through the mental mathematics test

When you are ready, start the tape. Instructions will be given to the children. The tape will indicate, with a bleep, where you should stop and answer any questions.

When the bleep is heard, stop the tape and answer any questions that the children may have, to ensure that the instructions are clearly understood.

Start the tape. The children will be asked a practice question. After a 5-second pause for the children to write their answer a bleep will sound, indicating that you should stop the tape again to answer any questions.

After stopping the tape, ensure that the children have correctly placed their answer to the practice question on the answer sheet and that they are aware of the information provided to the right of the answer box for some questions.

When they are ready to begin the test, tell the children that you will not be able to stop the tape again, or answer any questions once the tape has restarted.

Restart the tape and the test will begin. At the end of the test, children will be told to put down their pens and pencils, and you should switch off the tape and collect in the answer sheets.

If the equipment or tape malfunctions, the test will need to be read to the children. Instructions and a copy of the transcript for introducing the mental mathematics test in such an event follow.

Emergency use of tape transcript

This section contains a transcript for the teacher-read version of the year 4 mental mathematics test. It should be used **only** in the event of equipment or tape failure. In such an event, you should follow the instructions below.

- 1. You must have access to a clock or watch that measures accurately in seconds.
- 2. Give out the appropriate equipment as stated earlier and read through with the children 'Introducing the mental mathematics test' section.
- 3. 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.

- 4. Stop and answer any questions that the children may have.
- 5. Read out the practice question.
- 6. Repeat the question.

Wait 5 seconds (measured accurately using a clock or watch), then read out the following:

Now put down your pen or pencil.

- 7. Ensure that the children have correctly placed their answers to the practice question on their answer sheet. Remind the children that, for some questions, information is provided in or beside the answer. 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.
- 8. The questions follow. They must be read out exactly as written. Start by saying the question number, then read out each question twice in quick succession before leaving the 5- or 10- second response time. **These timings must be strictly adhered to**.
- 9. At the end of the test, tell the children to put down their pens or pencils, then collect their answer sheets.