

TEACHER'S NOTES

Introduction

Mental arithmetic skills are fundamental to achievement in mathematics. The purpose of Schofield & Sims **Mental Arithmetic** is to provide differentiated practice tests in key areas of the maths curriculum, to be administered regularly. In addition, there is a clear focus on how number is communicated using both number vocabulary and non-verbal mathematical signs and processes.

The series consists of seven pupil books – all of them conforming to a standard layout. This ensures that pupils are not presented with too many variables at once. **Mental Arithmetic 1** contains:

- 36 one-page tests grouped into three sections, each comprising three parts – Parts A, B and C
- two Progress Tests, with Results Charts for recording individual pupils' Progress Test results
- Check-up Tests covering number and measurement.

Parts A, B and C

Each of the 36 tests that form the bulk of the book appears on a single page and is divided into three parts (A, B and C) – the specific content of the parts is as described on the back cover. Parts A and B use pictures, symbols and simple language wherever possible so that pupils with reading difficulties will not be disadvantaged. It is suggested that one test is taken each week and that Parts A, B and C are set on separate days. Since speed with accuracy is important, a time limit of 10 minutes per part is recommended. However, you may adjust this as appropriate.

Answering the test questions

The material in each section is graded so that, before any test question is attempted, the work will usually have been covered in class. The coverage of each section is outlined on the Contents page. The term 'mental arithmetic' implies that answers only are required. For this reason, the books are presented in a one-per-pupil format, so that answers can be written in the blanks. If the pupils are allowed spare paper for workings out, remember that their responses will be slower.

Please note: You should explain to the pupils that ■ indicates a missing number.

Marking

A separate book of answers, like this one, is available to accompany each pupil book. When the pupils have completed a test you may read out the answers as they mark their own work. If work has been done in small groups or individually, the pupils could refer to the answer book themselves.

Progress Tests

The Progress Tests, each consisting of 20 items, appear at the end of Sections 1 and 2. These are designed as timed tests, to take exactly 10 minutes each. Each Progress Test should be administered on four different occasions, under test conditions that are as similar as possible each time. So that the test can be reused, ask pupils to write their answers on a separate sheet of paper, rather than in the pupil book. Alternatively, you may photocopy a Progress Test page that has not been completed, and have the pupils write their answers on the copy. After each attempt at a Progress Test has been marked, record each pupil's results on the Results Chart provided, or invite pupils to do so themselves.

Check-up Tests

The Check-up Tests at the back of the book focus on specific topics. Administer them at the end of the school year or when a pupil finishes the book: the results will give you an insight into any areas of weakness. When the pupil moves up to a new class, the completed book should be given to the new teacher so that he or she can plan work accordingly.