MEP: *Secondary Demonstration Project*

Years 7–9

PROJECT OUTLINE

1. Overview

This course has been developed in line with the MEP teaching philosophy, which encourages

- whole class interactive teaching, including pupils working at the board,
- mental maths skills,
- correct, precise and orderly spoken and written mathematics,
- more whole class progression with less differentiation,
- homework to be used as an integral part of learning.

In particular, our aim is to give all pupils the opportunity to develop their potential to the full.

The material in the course has been specifically developed to encourage the philosophy outlined above and in particular, to promote quality whole class interactive teaching. The material is developed from schemes of work, which are essentially based on National Curriculum topics, although some topics of interest and relevance outside the National Curriculum have been included.

More material than is needed is provided so that it is essential that teachers decide what is appropriate for the range of pupil ability in their class. There are initially a number of arithmetic units, and for high performing pupils, these should only be used for quick revision. For struggling pupils, it is crucial that these units (and mental maths throughout the course) are given prominence.

To help in making these decisions, we have outlined three distinct (but very much overlapping) routes through the material, namely:

Standard – for those pupils who are struggling, and who need to gain confidence in basic skills before being introduced to too many new topics and concepts; *(Level 2 or below on entry)*

Academic – the route that we expect most pupils to follow; basic skills will be revised and new topics and concepts introduced; *(Levels 3 or 4 on entry)*

Express – for those pupils who are progressing well and do not need much revision of basic skills, but who can cope readily with new concepts. *(Level 5 or above on entry)*

For those teaching mixed ability classes in Year 7, we recommend following the *Academic* route, although clearly some of your pupils will need more support and revision.

Details of the resources, including the pupil Practice Book are now given.

2. Resources: *Pupil Practice Books*

There will be two Practice Books (7A and 7B) for Year 7. We anticipate a similar framework in Year 8, but differentiated Practice Books for Year 9.

The schemes of work and hence the content of the book have been designed to cater for a wide range of ability levels so that most pupils will be following a broadly similar course in Year 7.

Key information in the Practice Books will be boxed in so that essential knowledge is highlighted.

Calculators are **not** required for Book 7A, and will only be required for use in appropriate units in Book 7B.

3. Resources: *Teacher Support*

The overall *Teacher Support* contains

- project outline (this document)
- schemes of work - yearly overview
- detailed scheme of work and suggested routes (*Standard, Academic, Express*) for 7A and 7B

For each unit, we are providing

- teaching notes outlining the content of the unit and where appropriate, a historical prospective,
- lesson plans for each route, based on 45 - 50 minute lessons,
- activities, both teacher led for introduction to topics and more substantial problem solving activities for pupil reinforcement of concepts and extension work or coursework,
- overhead slides for key introductory examples and activites and to encourage pupils working in front of the class,
- mental tests to encourage relevant mental maths skills,
- revision tests for each unit (*Standard, Academic* and *Express*) and marking schemes,
- answers for all questions in the Practice Book,
- extra exercises for each section with answers.

We will also be providing *Diagnostic Tests* (two per term) which will revise all the work so far covered. We will also be providing more coursework activities to help teachers build up a picture of each pupils "using and applying maths" skills during Key Stage 3.

Please note that some of the activities provide whole class introductory work for new concepts, whilst the overhead slides usually include masters for the key worked examples in the practice book. We hope that you will use these, or something equivalent, to introduce new concepts in a highly interactive way.

4. Resources: *Assessment*

As can be seen from the *Teacher Support*, there will be both end of unit revision tests and half termly diagnostic tests, covering all material up to that time. We will be putting suggested National Curriculum levels on these tests later in the year, and this will again help to build up a profile for each pupil, both for reporting to parents and for contributing to your assessment of progress.

We also expect that all pupils will take yearly MEP progress tests. For Years 7 and 8, these are summarised below.

	Year 7	**Year 8**
Potential Test	September 1998	–
Test A (non-calculator)	September 1998	September 1999
Test B	September 1998	September 1999

For the *Potential Test*, 30 minutes are allowed and for each of *Tests A* and *B*, 40 minutes are allowed. The tests are designed to show progress each year – pupils must be made aware of this and not be put off because they cannot answer many of the questions at the beginning of Y7. A value added analysis will be provided (based on both attainment and mathematical potential).