

## Mathematics Department

### Report to Governors, March 1986

#### Aims

The aim of the department is to ensure that each pupil on leaving the school has a good understanding of basic numeracy and that he has the knowledge to be able to use mathematics in life.

#### S.M.I.L.E.

The materials used for teaching in the 1st to 3rd forms are based on S.M.I.L.E., which enables us to provide an independent learning scheme for each pupil. The materials are divided into levels 0 through to level 11, providing work from pre-secondary to post O-level, and each level is sub-divided into different sections of the course; numeracy, mensuration through to trigonometry and logic.

#### Examination Policy

It is expected that all students should be entered for a public examination at the end of the 5th form.

Taking into account the Mock exam results and also previous work, every pupil is entered for the Joint Cambridge Local and E.A.E.B. 16+ examination if they have a chance of achieving a grade. The few who would almost certainly be unclassified are entered for the City and Guilds Numeracy examination.

The 6th form one-year course students are entered for the Numeracy exam as well as being allowed to retake the 16+ if they would improve on their previous result. Also other 6th formers may retake the 16+.

The A-level candidates are entered for the Cambridge Local Syllabus C Mathematics.

#### Syllabii.

The 1st to 3rd form working with S.M.I.L.E. progress through the levels covering the different sections of the course at their own rate. The average pupil should have reached level 5 by the end of the 3rd. form. The above average pupil could be well into the O-level syllabus by then.

The 4th and 5th form syllabii are based on the Joint Cambridge Local and E.A.E.B. 16+ exam syllabus.

Record-Keeping

With each pupil doing different pieces of work and with other 1500 possible tasks it is essential that good records are kept. A matrix of ten items is set for each pupil who is expected to complete it and do a test on those items in about 3 weeks. A record of the work, the level from which the work is set and the test result is kept.

Public Examination Results

The A-level results were extremely disappointing although not unexpected.

The decision to enter every 5th former for the 16+ resulted in a number of them being unable to cope with it. This year we have decided to enter those who have little chance to achieve a grade for the City and Guilds Numeracy examination.

Finance

The general shortage of money has resulted this year in the department being unable to provide any extra materials which are not absolutely essential. In particular we have been unable to purchase a stock of calculators which we had hoped to.

Future Trends

The move from the Nissan Huts into purpose built classrooms immediately improved the atmosphere in Mathematics. The further move into Berners House next year will enable us to change the whole style of mathematics teaching. We will be considering team teaching in the lower school which will also allow small groups to be given special help and new members of staff to be given a more helpful induction to the department.

Staffing

Year Group	R.A.R.	J.C.F.	G.B.	S.M.
1st.		15	14	13
2nd		16	15	15
3rd		17	17	18
4th	16	15	10	
5th	16	15	11	
Lower 6th	4	5	4	
Upper 6th	3			

The 1st to 3rd forms are taught in mixed ability groups, and the 4th and 5th forms in sets.

Groups of 10 pupils from each of the 1st to 3rd forms work in the computer room for 1 period each week, taught by R.A.R.