



Marshfields School

Mathematics Policy

2018

The Mission Statement and the Aims of the School

The Mathematics Policy at Marshfields endeavours to support and implement the Mission and Aims of the school – to be **Successful**, **Happy**, **Aspiring**, **Purposeful**, **Exciting** and to embrace **Diversity**. All students are valued as individuals and are expected to give of their best. Every student is provided with a broad, balanced, relevant and differentiated course of study enabling them to develop to their full potential and prepare for life in adult society.

The Unique Contribution of Mathematics

Mathematics:

- 1) gives the students insights into the structure of the number system;
- 2) equips the students with computational expertise;
- 3) stimulates the student's conceptual development of his/her physical environment;
- 4) provides opportunities for the student to use numbers in a physical context;
- 5) helps to develop logical thinking, accuracy and spatial awareness;
- 6) provides a universal form of communication - to represent, to explain and to predict.

Standards

The mathematics department plays an important part in the school's general improvement in standards both by cohort and individual student. We have high expectations of all our students and closely monitor and evaluate improvement. This is achieved by the use of Classroom Monitor; an electronic progress and assessment system, the implementation of annual testing, monitoring and evaluating maths targets, National Curriculum stages, EHC reviews and performance in external examinations.

Breadth, Balance and Relevance

Schemes of work are carefully planned in mathematics so as to ensure students receive broad, balanced and relevant programs of study. Pupils are taught in streamed groups (3 groups/year). All schemes take due account of the national curriculum, progressing to focus on real life maths skills which continues with functional skills in KS5.

Equality of Access

Equality of access is a fundamental right afforded to all students at Marshfields and is reflected in the aims of the school. Care is taken to ensure all students have equal access to the mathematics curriculum and are not disadvantaged for any reason.

Every Child Matters

Marshfields School and the maths department wholeheartedly support the sentiments of the Every Child Matters policy. All children whatever their background or circumstances need to:

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

We endeavour to promote achievement at all levels including GCSE for those students to whom it is relevant whilst also supporting and promoting vocational education. We are proactive in encouraging outside agency input where it will be of benefit to the wellbeing and progress of our students.

Continuity and Progression

Mathematics is one of the core subjects and as such is taught from year 7 through to Post 16. Continuity and progression is maintained and monitored as students move from one key stage to the next. Detailed programmes of study and student records ensure mathematical foundations are built upon and the correct teaching sequence maintained.

Differentiation

Progress in mathematics is essentially a building process in which each new stage relies on the mastery of the level preceding it. The teaching of mathematics is (and indeed must be) child centered and progress at a pace (and to a level) which maximizes the potential of the individual. Differentiation in terms of individual programme planning of both content and materials is essential in the delivery of mathematics at Marshfields.

Links Across the Curriculum

The principal reason for teaching mathematics must be its importance and usefulness in many other fields. Mathematics forges cross curricular links with virtually all timetabled subjects in one form or another. Cross curricular links have become even more focussed since the introduction of the Numeracy Life Skills Strategy. All tutors teach the numeracy topics money and time. Staff are encouraged to take every opportunity to draw mathematical experience out of any activities across the whole spectrum of curricular subjects and to apply and use mathematics in real contexts.

Citizenship

Marshfields takes 'a whole school approach' to Citizenship ensuring it runs through everything the school does. We endeavour to create links between pupils' learning in the classroom and activities that take place across the school, in the community and the wider world. The mathematics department is committed to supporting this philosophy wherever and whenever it can.

Range of Teaching Methods

A wide variety of teaching methods are used in the delivery of mathematics at Marshfields. Much of the work done is on an individual basis though we do feel that the occasional informal class lesson still has an important part to play. A lesson pitched at the correct level provides the class with the opportunity to work as a cohesive unit, allows individuals to practice their skills in public and brings mathematical language into a social setting. A balance is sought between 'discovery' learning and a more 'didactic' approach including lessons where 'discoveries' are guided. We aim to provide a mix of practical and theoretical; group and individual; written and mental work which forms the basis on which a sound mathematical knowledge can be built.

Organization - Including Resources

Students from years 7 – 11 work to a timetable similar to any secondary school. All students at Marshfields study 5 x 1hr 20min maths lessons per fortnight.

Extensive use is made of a broad resource base including audio-visual aids and computers.

Assessment Opportunities

Formative Assessment

(In class assessment)

Each student is continually assessed to evidence progress over time. This can be a review of ability before and after learning a specific objective. Or over a period of time assessing how a pupil has completed work at the stage they are at or progressed onto more challenging objectives. Progress data is recorded for Classroom Monitor objectives, tests and ongoing teacher assessment. Progress is reported to parents through the EHC Procedure, Interim reports and Full School reports.

Summative Assessment:

(Standardized Tests)

KS3 & KS4

GI Assessment Progress in Maths Assessments (annually in June)

Gillham & Hesse: Basic Number Screening Test

KS4

AQA Entry Level Maths 1,2 & 3

and where appropriate:

Edexcel Awards Level 1 & 2 Number & Measure

Edexcel Awards Level 2 Algebra

GCSE Mathematics

KS5

Edexcel Functional Skills Entry Level 1, 2, 3.

BTech Money & Finance Course Level 1 & 2

Homework

The mathematics department seeks to fully implement the homework policy of the school.

Marking

Marking in the maths department fully endorses the school’s marking policy. Marking throughout the school in maths has been agreed and standardized.

Quality Assurance

Quality Assurance is monitored by the Lead Teacher of Mathematics and quality maintained by assessment and observation and in the formation of standardization and moderation groups as required.

Quality is further assured by the Headteacher and Deputy Headteacher.

Conclusion

This mathematics policy, along with the curricular document, has been written to meet the needs of the students at Marshfields.

To maintain interest and motivation we employ only schemes and topics in which clearly perceived and realistically obtainable medium and short term goals are set. We try to create, use and exploit enjoyable situations in order to deliver teaching points. Flexibility of planning and organization are considered essential.

Further information on any aspect of the Mathematics Curriculum at Marshfields should be addressed to the Lead Teacher at the school

Miss E. Favell

Feb 2018

Presented to Governors.....

Approved by Governors.....