Mathematics and Computing at The Gilberd School

The Gilberd is an outstanding school with a clear vision of excellence and attainment; our Mathematics and Computing Curriculum Area mirrors this. As a team, we value the combination of a rigorous curriculum with a passion for teaching this fundamentally important subject.

Dedicated and diverse, we comprise a team of ten full time and three part time subject specialists and two learning support assistants who all teach across key stages three and four and across the full spectrum of ability. Within the team there are two Lead Teachers and three members of the team with TLRs.

Mathematics Undergraduates from Essex University supplement our provision whilst conducting research within the school. The Gilberd, and particularly the Mathematics Department, are very active within the Colchester Teacher Training Consortium, enabling our staff to assume greater responsibility in developing the skills of others, in mentoring and in meetings with colleagues beyond the school, whilst being reflective about our own practices during the process.

We currently offer EDEXCEL GCSE to all students and Entry Level, Free Standing Maths Qualification and the Edexcel Award in Number and Measure to selected students. Although we do not teach A' level classes, we provide Master Classes and Lectures. Voluntary study for the OCR Free Standing Maths Qualification is popular with the most able in Year 11.

We teach OCR Computer Science and have recently introduced the Pearson BTEC in Digital Information Systems.

There are good links with local primary schools through their participation in UKMT Junior Challenge at The Gilberd alongside our KS3 Mathematicians. We are keen to expand these links further.

We currently teach seven hours of Mathematics per fortnight to Year 7 and 8 sets and eight hours per fortnight in Years 9, 10 and 11. In addition to this, we run holiday revision courses for Year 11 students; the uptake for these is always very high and the workshops highly productive. Interventions are provided by Mathematics staff in all year groups but are most frequent in Year 7 for Catch-Up Premium students and in Year 11 during the lunch period.

Computer Science is taught for two hours a fortnight in Years 7 and 8, with five lessons every two weeks in Years 9 to 11.

Resources
- Each classroom has a projector, whiteboard, speakers and desktop computer.
- Mathematics has timetabled access to computer suites with the possibility of booking extra sessions on occasion.
- Each teacher has a laptop.
- Sets of iPads and laptops are bookable via an online system.
- Dictionaries and thesauruses are in all rooms.
- We subscribe to the Mathswatch website and have a wealth of resources on the Gilberd VLE.
- There are two timetabled Learning Support Assistants attached to the team.
- A variety of text books are available in each Mathematics and Computing classroom.

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Extra-Curricular
- Our after school Maths club is well attended. Its vibrant atmosphere from students enjoying games and puzzles is a joy.
- Lunchtime catch up club sees Year 9 students taking responsibility for encouraging younger students to have fun with their basic skills.
- Cipher Club in the Autumn term has its devotees and is a further opportunity for those with previous participation to support the less experienced decoders.
- UKMT Junior and Intermediate Challenges are organised for selected students from years 6 to year 11 who exhibit flair for learning in Mathematics and the ability to think 'outside the box'.
- Team challenge club to vie and train for team places for Maths challenges against local schools and for UKMT Team challenges is great opportunity for students to work alongside like minded enthusiasts and students in other year groups.
- Maths STEAM club is open to all with gravitas proving quite a draw at present.

Organisation
- Students in Years 7 and 8 have seven hours of Mathematics each fortnight, whilst in Years 9 to 11 they have eight hours. We operate a two-week timetable and lessons are one hour in length.
- Mathematics classes from years 7 to 11 are set by ability.
- Each year group is split into two populations for timetabling purposes, the ability profile of each being similar.
- There are six or seven Mathematics sets in each population, dependent upon the size of the year group.
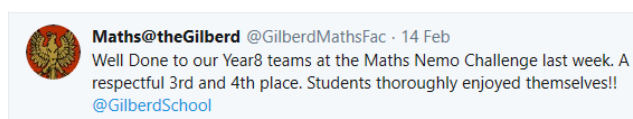
Assessment Overview
Years 7 and 8
- Baseline testing within the first fortnight of Year 7.
- One assessment for Years 7 and 8 in each school term using highly differentiated papers based around Entry level questions, Number and Measures questions and Foundation tier GCSE questions. Papers are compiled to assess progress on topics covered in the Scheme of work and to allow students to demonstrate wider knowledge and ability and an increasing number of opportunities to apply their learning to multi-step and multi-topic questions and unfamiliar topics.
- Overlap between the assessments for consecutive sets allows decisions regarding set changes.
- Each assessment is both formative and summative.
- Results are shared across the school to allow monitoring of progress and targeting of interventions.
- Subjects across the curriculum teach different revision strategies from Year 7 and encourage them to apply them in other subjects.
- Individual feedback is provided to students following assessments and both teaching and homework then provide opportunity for response to this.

Years 9 to 11

- This is similar to Years 7 and 8 but assessments are more frequent with transition over the course of Year 9 to full GCSE papers. Higher sets commence use of Higher papers during Year 9 following a transition phase and selected students in sets 3 and 4 later in Year 10.
- The end of Year Assessment in Year 10 is a full set of GCSE style papers as are the December and March mocks during Year 11.

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Well Done to our Year8 teams at the Maths Nemo Challenge last week. A respectful 3rd and 4th place. Students thoroughly enjoyed themselves!! @GilberdSchool

Outcomes

	National Average	2017 Prediction	2017 Result 263 students	National Average	2018 Prediction	2018 Result 262 students	National Average	2019 Prediction	2019 Result 270 students
A*/A or 7+	19%	23%	24%	19%	27%	24%	19%	23%	20%
5+	48%	55%	57%	48%	60%	62%	48%	58%	55%
A*-C or 4+	69%	76%	79%	69%	80%	80%	69%	81%	83%
Progress 8		0.5	0.7		0.5	0.6		0.2	0.2
Average Grade		4.8	5.0	4.6	5.1	5.1	4.8	5.0	5.0

What are we looking for?

An outstanding and passionate teacher of Mathematics to join this thriving team, to assist in maintaining its outstanding reputation and results. We welcome team players, willing to contribute ideas to keep our teaching fresh and to commit to our ethos of supporting one another and attracting and developing the teachers of the future. Positive and solution based, you will promote creativity, diligence and excellence in your classroom.

As a school, we value oracy and accurate communication; we encourage innovation and a high standard of reflection in teaching and learning.

We look forward to meeting you!