

Science at The Gilberd School

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







Dedicated and diverse, we are a team of thirteen full time and two part time subject specialists who all teach across Key Stages three and four and across the full spectrum of ability. Within the team there is a Curriculum Leader, two Key Stage Co-ordinators and an Interventions Co-ordinator. The Subject Leader for Health and Social Care is also within the Science Curriculum Area. We are supported by a team of three dedicated technicians.

The Gilberd, and particularly the Science Department, are very active within the Colchester Teacher Training Consortium. This enables 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. Students study GCSE in Years 9 - 11. Whilst Combined Science is studied by the majority of our students, those who would like to study the Separate Sciences can do so through choosing this as one of their option choices. As an 11-16 school, although we do not teach A level classes, we provide masterclasses and lectures to enhance students' interest and their aspirations.

We currently teach six hours of Science per fortnight to Years 7 and 8 and nine 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 are highly productive.

Resources

- Each classroom has a projector, visualiser, whiteboard, speakers and laptop computer.
- Science has timetabled access to computer suites with the possibility of booking extra sessions on occasion.
- Sets of iPads and laptops are bookable via an online system.
- Dictionaries and thesauruses are in all rooms.
- We subscribe to the Active Learn (Year 7-11) website, Tassomai (Year 11) and have a wealth of resources on the Gilberd VLE.
- A variety of text books are available in each Science classroom.

Extra-Curricular

- Our after-school Science club is well attended by Years 7 and 8. This is run by science staff on a rota.
- We were delighted to progress to the national finals in 2019 of the UK Rocketry Competition.
- STEAM club is open to all and is highly popular.





Organisation

- Students in Years 7 and 8 have six hours of Science each fortnight, whilst in Years 9 to 11 they have nine hours. We operate a two-week timetable.
- Science 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 Science sets in each population, depending upon the size of the year group.





Assessment Overview

Years 7 and 8

- One termly assessment for Years 7 and 8 using highly differentiated papers. 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.
- Overlap between the assessments for consecutive sets allows for 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.

• Individual feedback is provided to students following assessments and both teaching and homework then provide opportunities to respond to this.

Years 9 to 11

- This is similar to Years 7 and 8 but assessments are more frequent. After each topic students take an end of unit test and feedback is given to students.
- There are end of year assessments for Years 9 and 10. Year 11 sit a December Mock exam and a March mock exam. These are whole GCSE style papers.

Outcomes

Combined Science

	National Average	2019 Prediction	2019 Result	КРІ	National Average	2020 Results
A*/A or 7+	5%	1%	7%	A*/A or 7+	5%	23%
5+		42%	44%	5+		57%
A*-C or 4+	48%	69%	70%	A*-C or 4+	48%	80%
	Progress 8	0.3	0.4		Progress 8	0.5
Students = 209	2019 National Average	2019 Prediction	2019 Result		2020 National Average	2020 Results
Average grade	4.1	4.4	4.5	236	4.1	4.5

Separate Science

Biology

	National Average	2019 Prediction	2019 Result	КРІ	National Average	2020 Results
A*/A or 7+	42%	62%	62%	A*/A or 7+	42%	69%
5+		95%	97%	5+		92%
A*-C or 4+	90%	100%	98%	A*-C or 4+	90%	97%
	Progress 8	0.4	0.6		Progress 8	0.0
Students = 61	2019 National Average	2019 Prediction	2019 Result		2020 National Average	2020 Results
Average grade	6.5	7.0	7.1	62	6.2	6.2

Chemistry

	National Average	2019 Prediction	2019 Result	KPI	National Average	2020 Results
A*/A or 7+	42%	55%	72%	A*/A or 7+	42%	77%
5+		92%	97%	5+		95%
A*-C or 4+	90%	100%	100%	A*-C or 4+	90%	97%
	Progress 8	0.1	0.7		Progress 8	0.6
Students = 61	2019 National Average	2019 Prediction	2019 Result		2020 National Average	2020 Results
Average grade	6.5	6.5	7.1	62	6.1	6.7

Physics

	National Average	2019 Prediction	2019 Result	КРІ	National Average	2020 Results
A*/A or 7+	42%	58%	65%	A*/A or 7+	42%	75%
5+		95%	98%	5+		93%
A*-C or 4+	91%	100%	98%	A*-C or 4+	91%	98%
	Progress 8	0.1	0.7		Progress 8	0.5
Students = 61					2020 National Average	2020 Results
Average grade	6.5	6.6	7.1	62	6.2	6.7

What are we looking for?

An outstanding and passionate teacher of Science 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!