

MATHS CURRICULUM OFFER 2023 – 2024

Subject	Mathematics
Intent	<p>Our vision is for all students to leave CSS with the numerical and Mathematical tools required for day-to-day life. We aim to develop all students to their full potential through innovative teaching and the use of engaging activities and ICT. By offering a variety of courses tailored to each individual student, we support them in achieving at least one Mathematical qualification by the end of Year 11, thus enabling progression onto their next steps into college or apprenticeship. We place high levels of importance on raising the confidence and aspirations of our students, helping them to overcome any preconceptions or difficulties with Mathematics and instilling a love of the subject along the way.</p>
Implementation	<p>Students receive up to four lessons per week, depending on location and provision. All lessons are structured in the same way, including all or most of the following:</p> <ul style="list-style-type: none"> • Starter, main and ongoing plenaries • Modelling of mathematical methods • Assessment opportunities: self-assessment/peer assessment/teacher assessment • Engaging differentiated resources • Interactive activities and games • The opportunity for application to examination-style questions • Use of literacy, numeracy and ICT via interactive whiteboard/iPads • The use of scientific calculators • Links to the real world, including scenarios relevant to our students.
Impact	<p>All students require working Mathematical skills to access and function in the real world. Our aim is for all students to leave CSS with a Mathematics qualification ranging from Entry Level to iGCSE. All of these qualifications demonstrate the ability to apply Mathematical thinking and provide access to a range of next steps following CSS.</p> <p>The iGCSE at a grade 4, or the Functional Skills Level 2 equivalent, both allow students access onto a number of Level 2 courses, and some Level 3 courses in conjunction with other qualifications. The iGCSE at grades 1-3, or the Functional Skills Level 1 equivalent, allow students access onto a number of Level 1 courses, and some Level 2 courses in conjunction with other qualifications. All levels of Mathematics qualification studied at CSS will support with an application for a job or apprenticeship.</p> <p>Any student who does not achieve a Level 2 or equivalent qualification by the end of Year 11 will be expected to continue to learn Mathematics until the age of 18, regardless of their next steps. The work completed towards the Entry Level 1/2/3 and Level 1/2 Functional Skills qualifications, as well as the iGCSE qualification, provide a solid foundation for this additional study.</p> <p>In an ever-changing and increasingly tough job market, being able to set yourself apart from another applicant is so important; having a qualification in Mathematics can only be a strength. We spend a significant amount of time relating as much Mathematics back to real-life scenarios as possible, in order to prepare students for life post-CSS.</p>

<p>Accreditations</p>	<p>Edexcel Functional Skills Entry Level 1/2/3 Edexcel Functional Skills Level 1 Edexcel Functional Skills Level 2</p> <p>Edexcel iGCSE Mathematics A (Foundation/Higher Tier)</p> <p>Students working towards all levels of the Prince's Trust Award complete the 'Managing Money' unit of the course in their Maths lessons.</p>
<p>Enrichment opportunities</p>	<p>Possible trips include:</p> <ul style="list-style-type: none"> • Colchester Zoo – maths trail & workshop • Sealife Adventure – maths trail • Bletchley Park • The Bank of England Museum • The Science Museum • Thorpe Park - the mathematics of rollercoasters • The Royal Observatory, Greenwich • Legoland Windsor – Lego Robotics – Space Challenge • Royal Institution Masterclasses • iFLY – science and Maths of skydiving • 4DX Cinema Trip
<p>Safeguarding</p>	<p>Students are exposed to a number of topics that lend themselves to discussions around staying safe, particularly when discussing real-life applications of specific mathematical concepts. Our work with students on the Prince's Trust 'Managing Money' unit lends itself well to these conversations too.</p>
<p>SEND</p>	<p>Whilst there is an acknowledgement throughout this document that all pupils within CSS fall under the SEND support umbrella, it is worth noting the additional measures taken to support those young people with more severe needs (EHCP).</p> <p>The following measures are in place across the department:</p> <ul style="list-style-type: none"> • All teachers will have read and understood the young person's EHCP. • Adaptions with be made to 'normal ways of working' in recognition of the young person's individual requirements. • Use of coloured overlays and paper to assist with reading. • Use of digital technology, where appropriate, to assist with handwriting and reading - this is limited by the nature of the subject but is on offer in extreme cases. • The use of manipulatives to assist with the teaching and learning of certain topics enable young people to 'see' the maths as a concrete concept rather than a more abstract idea. • Information is provided to and received from the SENP regarding access arrangements for external assessments. These are based on the young person's normal ways of working in lessons.

Outline of Virtual Curriculum offer	<p>For those pupils unable to attend one of the centres:</p> <ul style="list-style-type: none"> • Lessons will be offered through a virtual timetable and accessed via TEAMS. Lessons will be delivered by Maths teachers. • Any curriculum offer will reflect the expectations of the existing curriculum and work alongside the existing schemes of work to ensure no learning time is compromised and all topics are covered. • Additional work will be assigned using a variety of online portals. These will provide all pupils with levelled and differentiated questions and videos targeted towards gaps in understanding and in line with the existing scheme of work. • Work will be assessed in line with teaching expectations with feedback given both verbally and in writing.
Encouraging Reading in Mathematics	<p>Whilst mathematics does not lend itself to reading in the same way as many other subjects, we take every opportunity to encourage pupils to decode key words and understand how to use them in context.</p> <ul style="list-style-type: none"> • All key words for each topic are introduced at the beginning of each module and then referred to when used in context. • Word of the week and key words are displayed on the wall in all teaching rooms to further encourage reading and understanding of these words. • The use of word-based questions, in line with exam styles, are used to encourage pupils reading and understanding.
Digital Literacy	<p>ICT plays a huge part in pupil's day-to-day lives, and this is recognised in the Maths offer. Within our curriculum, both KS3 and KS4 students have opportunities to consider issues around the validity of online data such as: identifying bias or manipulation of information to serve a purpose.</p> <p>We also subscribe to several online portals that are used to supplement the offer. These are accessed via either laptop computers or iPads – support is in place to assist with any issues.</p> <p>Students with exam access arrangements have access to computer reading and writing software in lessons – to embed as their normal way of working - and can confidently use this software to support their success in their KS4 exams.</p>
Careers and Employment Links	<p>Mathematics plays a huge role in all careers and therefore, career paths and links to employment opportunities is something that is at the forefront of many conversations in Maths lessons.</p> <p>We have a dedicated careers board with information around more Maths specific roles and will signpost pupils to different areas or highlight where the subject is relevant on an ad hoc basis.</p> <p>The department also supports the PSCHE team during careers week adapting lessons to suit the focus of the program.</p>