

Sir John Cass Red Coat School Programme of Study – Key Stage 3
Subject: Mathematics

***Students embark on GCSE Mathematics from year 9, for year 9 PoS please see KS4**

Year 7	Year 8
<p><u>Topics Covered/ Areas of Focus:</u></p> <ul style="list-style-type: none"> • Written calculations • Area and volume • Statistics • Basic Algebra • Angle geometry • Proportional reasoning • Straight line graphs 	<p><u>Topics Covered/ Areas of Focus:</u></p> <ul style="list-style-type: none"> • Methods and notation for algebra • Probability • Venn diagrams • Further proportional reasoning • Calculations with fractions and percentages • Index notation and laws • Further Statistics
<p><u>Skills Development & Expected Progress:</u></p> <p>Students will develop their ability to reason mathematically and to solve problems of increasing complexity. Specifically, enhance their written and mental calculation skills, solve geometric problems and discuss different types of data.</p>	<p><u>Skills Development & Expected Progress:</u></p> <p>Students continue to build on and reinforce their skills. They will solve more demanding problems, and begin to place Maths in context. They will focus on giving more detailed accounts of the work they have done, and in improving their mathematical communication.</p>
<p><u>Assessment:</u></p> <p>Students will be assessed in their groups after each unit, and also via regular unit tests.</p>	<p><u>Assessment:</u></p> <p>Students will be assessed in their groups after each unit, and also via regular unit tests.</p>
<p><u>Literacy:</u></p> <p>Students will be taught to use and understand key vocabulary, as well as encouraged to use words in context of discussion work.</p>	<p><u>Literacy:</u></p> <p>Students will be taught to use and understand key vocabulary, as well as encouraged to use words in context of discussion work.</p>
<p><u>Numeracy:</u></p> <p>Students will be taught to develop their mental and written calculation skills. They will also be taught how to apply their skills to real life situations</p>	<p><u>Numeracy:</u></p> <p>Students will be taught to develop their mental and written calculation skills. They will also be taught how to apply their skills to real life situations</p>

<p><u>ICT:</u></p> <p>Students will use various ICT suite, including Mymaths to both develop and test their understanding of the Mathematics they are learning. Where appropriate they will be taught how to use ICT to solve problems.</p>	<p><u>ICT:</u></p> <p>Students will use various ICT suite, including Mymaths to both develop and test their understanding of the Mathematics they are learning. Where appropriate they will be taught how to use ICT to solve problems.</p>
<p><u>Life in Modern Britain:</u></p> <p>Students will be taught to read, use and understand statistics.</p>	<p><u>Life in Modern Britain:</u></p> <p>Students will be taught to read, use and understand statistics.</p>
<p><u>SMSC:</u></p> <p>Students will be encouraged to discuss material, and work in groups on certain tasks. There will be topics such as data and statistics which may lead to discussions about ethics.</p>	<p><u>SMSC:</u></p> <p>Students will be encouraged to discuss material, and work in groups on certain tasks. There will be topics such as data and statistics which may lead to discussions about ethics</p>
<p><u>Meeting the needs of individual students & Additional Support:</u></p> <p>Students will be placed in to ability groups, which will be supported for students who find Maths more challenging. For students who are gifted, there are opportunities to enter for the UK Junior Maths Challenge.</p>	<p><u>Meeting the needs of individual students & Additional Support:</u></p> <p>Students will be placed in to ability groups, which will be supported for students who find Maths more challenging. For students who are gifted, there are opportunities to enter for the UK Junior Maths Challenge.</p>
<p><u>Extra-Curricular Activities & Club:</u></p> <p>There are out of hours sessions that are offered to students who are required as needing additional support.</p>	<p><u>Extra-Curricular Activities & Club:</u></p> <p>There are out of hours sessions that are offered to students who are required as needing additional support.</p>
<p><u>Independent Study/ Homework:</u></p> <p>Student will be regularly set a mixture of written and computer based homework that will consolidate work that is set in class. There may also be times where students will be involved in a flipped classroom.</p>	<p><u>Independent Study/ Homework:</u></p> <p>Student will be regularly set a mixture of written and computer based homework that will consolidate work that is set in class. There may also be times where students will be involved in a flipped classroom</p>
<p><u>Resources for Learning Support and VLE:</u></p> <p>Copies of textbooks are available in the VLE.</p>	<p><u>Resources for Learning Support and VLE:</u></p> <p>Copies of textbooks are available in the VLE.</p>