

## Curriculum Intent, Implementation and Impact 2021-22

Subject (include exam board if examination subject): GCSE Mathematics – Edexcel

Year group: 11

Lessons per fortnight: 8

### Intent:

The intent of the Mathematics curriculum at TBS is to nurture students to become confident mathematicians. They will develop resilience, spatial reasoning and problem solving skills that will allow them to connect different mathematical concepts together. Our students will be curious in their approach to this course, as they will be challenged through the different questions/ concepts that are suitable and appropriate for their individual level. This will be evident not only in our lessons but also in the form of extended learning opportunities where students will be encouraged to think outside of the box through National Maths Challenge questions, and further their learning through nationally acclaimed websites like DrFrostMaths.com. Support for students in need of it will be provided through the use of intervention groups. Ultimately the intent of the mathematics curriculum is to challenge our students to become ambitious individuals who will be successful in their approach to solving complex problems and who will be respectful and empathetic of others. Moreover, they will develop an understanding of the fact that maths goes beyond numerical problems and text books and will start to see and appreciate its beauty in artwork, music, nature, sport, science and the wider world in general.

The intention of this second half of the course is to equip our students with the mathematical knowledge that they will need in order to achieve the GCSE grade necessary for them to take their next step into post 16 education and beyond.

### IMPLEMENTATION:

#### Higher Tier

| Term   | Topics studied<br>Add dates and any assessments included  | Extended learning opportunities<br>(homework, controlled assessments, field work, trips etc.)   | How parents could support students   |
|--------|---|---|--|
| Term 1 | <ul style="list-style-type: none"><li>Unit 13 - Trigonometry</li><li>Unit 18 Vectors and Geometric Proof</li><li>Unit 19 Proportions and Graphs</li></ul> | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Dr Frost website</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Ensure that their child is working through the Revision guides/ Workbooks</p> |

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|----------|--|---|--|
| Term 2   | MOCK Exams<br>Unit 17 Further Algebra  | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Dr Frost website</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Ensure that their child is working through the Revision guides/ Workbooks</p>         |
| Term 3   | <ul style="list-style-type: none"> <li>Review of MOCKS</li> <li>Exam preparation and go over topics based on QLA.</li> </ul> | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Dr Frost website</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Ensure that their child is working through the Edexcel Revision guides/ Workbooks</p> |
| Term 4   | 2nd MOCK Exams   |   |  |
| Term 5/6 | GCSE Summer Examinations   |   |  |

### Foundation Tier

| Term   | Topics studied<br>Add dates and any assessments included  | Extended learning opportunities<br>(homework, controlled assessments, field work, trips etc.)   | How parents could support students   |
|--------|---|---|--|
| Term 1 | <ul style="list-style-type: none"> <li>Unit 12 Pythagoras and Trigonometry</li> <li>Unit 13 Probability</li> <li>Unit 17 Perimeter, Area and Volume part 2</li> </ul> | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Dr Frost website</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Ensure that their child is working through the Revision guides/ Workbooks</p> |

|          |   |   |  |
|----------|---|---|--|
| Term 2   | <p>MOCK Exams</p> <p>Unit 15 Constructions</p> <p>Unit 18 Further Numbers</p> <p>Unit 19 Vectors</p>  | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Dr Frost website</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Ensure that their child is working through the Revision guides/ Workbooks</p>   |
| Term 3   | <ul style="list-style-type: none"> <li>• Review of MOCKS</li> <li>• Exam preparation and go over topics based on QLA.</li> <li>• Unit 9 Graphs</li> <li>• Unit 16 Quadratics</li> <li>• Unit 20 More Algebra</li> </ul> | <p>Working through past paper and revision guides.</p> <p>Complete all homework set on Dr Frost.</p> <p>Use Maths Genie to work on specific grade level questions.</p> <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p> | <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Encourage and help with your child in remember the key terms</p> <p>Ensure that their child is working through the Edexcel Revision guides/ Workbooks</p> |
| Term 4   | 2nd MOCK Exams  | <p>Revision classes held after school for an hour on Thursday.</p> <p>Support/ Intervention sessions during form time, Monday through to Thursday.</p>  |  |
| Term 5/6 | GCSE Summer Examinations  |   |  |

## IMPACT:

The impact of the course is measured primarily through our ongoing formative and summative assessments. Regular formative assessments allow teachers to address students misconceptions and areas of weakness. These assessments are opportunities for students to demonstrate their mathematical knowledge. In year 11 many of the assessments undertaken will be in the form of mocks and full suites of past papers. Results will be reported on in the form of National Curriculum equivalent levels. The content being reported on will cover 5 different categories: Number, Algebra, Ratio/ Proportion/ Rates of Change, Geometry and Measures, Statistics and Probability. This

year 11 course will prepare our students well for their GCSE in the May. Ultimately, at the end of their time with us, students will be able to think independently and process their thoughts in a logical and sequential way, hence enhancing any future decision making and judgements. Their GCSE will support applications into further education, apprenticeships and any subsequent employment.