Curriculum Intent, Implementation and Impact

Subject : GCSE Mathematics - Edexcel

Year group: Year 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.

At the start of this course students will be divided into the Higher and Foundation Tier. The intent is that all of our students sit the tier of paper that is most appropriate to their abilities. As such, final decisions on Tier entry will not be made until the Spring of year 11, hence enabling maximum flexibility over two very important years. By the end of this year students will have secured over half of the content of the GCSE syllabus and will be in a good position to embark on the second half of their journey towards gaining their GCSE in Mathematics.

IMPLEMENTATION:

Foundation Tier

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Term 1	Ratio & proportion	Google classroom - With extended	Engage with Dr.Frost with their child
	(2 weeks)	learning opportunities such as Dr.Frost.	Ensure
	· Right angled	DI.1 103t.	Liliane
	triangles		that all homework is cross
	(Pythagoras &		referenced and completed
	trigonometry) (2	Formative assessments to take place	on google
	weeks)	at the end of each unit test with	classroom
		opportunities to respond to feedback.	Encourage
	Duchahilitu (2		and help their child to
	 Probability (2 weeks) 		remember key terms
	weeks)	Summative assessment once a term	Ensure
		covering all previous topics taught to	
		ensure good recall and practice.	that their child is working
	 Exam preparation 		through the
			Edexcel
			Revision guides/ Workbooks
			VVOIKDOOKS

Term	Mock ovame	Google classroom With extended	Engage with Dr.Frost with
	Mock exams,	Google classroom - With extended	
2	feedback & review	learning opportunities such as	their child
	88 141 11 41	Dr.Frost.	Ensure
	Multiplicative		that all homework is cross
	reasoning (2		
	weeks)	Formative assessments to take place	referenced and completed
		at the end of each unit test with	on google
			classroom
	Canatuustiana lasi	opportunities to respond to feedback.	Encourage
	Constructions, loci		and help their child to
	& bearing (2 weeks)		•
		0	remember key terms Ensure
		Summative assessment once a term	Elisure
		covering all previous topics taught to	that their child is working
		ensure good recall and practice.	_
			through the Edexcel
			Revision guides/ Workbooks
			VVOIKDOOKS

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Term 3	Quadratic equations & graphs (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	Perimeter, area & volume 2 (2 weeks)	Formative assessments to take place	that all homework is cross referenced and completed on google
	Fractions, indices & standard form (2 weeks)	at the end of each unit test with opportunities to respond to feedback.	classroom Encourage and help their child to remember key terms
	· Mock preparation	Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	Ensure that their child is working through the
			Edexcel Revision guides/ Workbooks

Term 4
Dr.Frost. Dr.Frost. Ensure that all homework is cross referenced and completed on google classroom Encourage and help their child to remember key terms Ensure that all homework is cross referenced and completed on google classroom Encourage and help their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/
Formative assessments to take place at the end of each unit test with opportunities to respond to feedback. Summative assessment once a term covering all previous topics taught to ensure good recall and practice. that all homework is cross referenced and completed on google classroom Encourage and help their child to remember key terms Ensure that that all homework is cross referenced and completed on google classroom Encourage that their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/
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Term 5	· More algebra	Google classroom - With extended learning opportunities such as	Engage with Dr.Frost with their child
	Revision &	Dr.Frost.	Ensure
	preparation for final exams	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and completed on google classroom Encourage
		Summative assessment once a term	and help their child to remember key terms Ensure
		covering all previous topics taught to ensure good recall and practice.	that their child is working through the Edexcel Revision guides/
			Workbooks

Higher Tier

Term	Topics studied	Extended learning opportunities	How
	Add dates and any	(homework, controlled	parents
	assessments included	assessments, field work, trips etc.)	could
			support
			students

Term 1	Multiplicative reasoning (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their
	Similarity & congruency (2 weeks)	Formative assessments to take place	child Ensure
	,	at the end of each unit test with opportunities to respond to feedback.	that all homework is cross
	Trigonometry 2 (2 weeks)	Summative assessment once a term	referenced and completed
	· Mock exam prep	covering all previous topics taught to ensure good recall and practice.	on google classroom Encourage
			and help their child to remember key terms Ensure
			that their child is working through the Edexcel
			Revision guides/ Workbook s

Term 2	
Formative assessments to ta at the end of each unit test v opportunities to respond to f (1 week)	ake place with that all feedback. homework is cross referenced
Circle theorems (1 week) Summative assessment one covering all previous topics ensure good recall and prace	taught to on google
	and help their child to remember key terms Ensure
	that their child is working through the Edexcel Revision guides/ Workbook s

Term 3	More algebra (2 weeks) Vectors (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	· Exam preparation	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and
		Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	completed on google classroom Encourage and help their child to remember key terms Ensure
			that their child is working through the Edexcel Revision guides/ Workbook s

Term 4	· Exam, for review · Proport weeks)	eedback &	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
			Formative assessments to take place	Liisuic
			at the end of each unit test with	that all
	· Revision papers	n & past	opportunities to respond to feedback.	homework is cross referenced and
			Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	completed on google classroom Encourage
				and help their child to remember key terms Ensure
				that their child is working through the Edexcel Revision guides/ Workbook s
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Formative assessments to take place at the end of each unit test with opportunities to respond to feedback. Summative assessment once a term covering all previous topics taught to ensure good recall and practice. Summative assessment once a term covering all previous topics taught to ensure good recall and practice. and completed on google classroom Encourage and help their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbook s	Term 5	· Revision & past papers	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
opportunities to respond to feedback. Summative assessment once a term covering all previous topics taught to ensure good recall and practice. Summative assessment once a term completed on google classroom Encourage and help their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbook				
Summative assessment once a term covering all previous topics taught to ensure good recall and practice. and help their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbook				homework is cross referenced
their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbook			covering all previous topics taught to	completed on google classroom
child is working through the Edexcel Revision guides/ Workbook				their child to remember key terms
1 1				child is working through the Edexcel Revision guides/ Workbook

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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

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the second half of their journey towards gaining their GCSE in Mathematics.

IMPLEMENTATION:

Foundation Tier

Term	Topics studied Add dates and any assessments included	Extended learning opportunities (homework, controlled assessments, field work, trips etc.)	How parents could support students
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Term 1	· Ratio & proportion (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	Right angled triangles (Pythagoras & trigonometry) (2 weeks)	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and completed on google classroom Encourage
	· Probability (2 weeks)		and help their child to remember key terms
	· Exam preparation	Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	Ensure that their child is working through the
			Edexcel Revision guides/ Workbooks

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Term 2	Mock exams, feedback & review	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	Multiplicative reasoning (2 weeks) Constructions, loci & bearing (2 weeks)	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and completed on google classroom Encourage and help their child to
		Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbooks

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Term 3		Quadratic equations & graphs (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	·	Perimeter, area & volume 2 (2 weeks)	Formative assessments to take place at the end of each unit test with	that all homework is cross referenced and completed on google classroom
		Fractions, indices & standard form (2 weeks)	opportunities to respond to feedback.	Encourage and help their child to remember key terms
		Mock preparation	Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	that their child is working through the
				Edexcel Revision guides/ Workbooks

Term 4	 Mock exams, feedback & review 	Google classroom - With extended learning opportunities such as	Engage with Dr.Frost with their child
		Dr.Frost.	Ensure
	· Congruence & similarity	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and completed on google classroom Encourage
			and help their child to remember key terms
		Summative assessment once a term	Ensure
		covering all previous topics taught to ensure good recall and practice.	that their child is working through the
			Edexcel Revision guides/ Workbooks

Term 5	· More algebra	Google classroom - With extended learning opportunities such as	Engage with Dr.Frost with their child
	· Revision & preparation for final	Dr.Frost.	Ensure
	exams	Formative assessments to take place	that all homework is cross referenced and completed on google
		at the end of each unit test with opportunities to respond to feedback.	classroom Encourage
		opportanimos to respond to resultation	and help their child to remember key terms
		Summative assessment once a term	Ensure
		covering all previous topics taught to ensure good recall and practice.	that their child is working through the
			Edexcel
			Revision guides/ Workbooks

Higher Tier

Term	Topics studied Add dates and any assessments included	Extended learning opportunities (homework, controlled assessments, field work, trips etc.)	How parents could support students	
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 Multiplicative reasoning (2 weeks) 	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
 Similarity & congruency (2 weeks) Trigonometry 2 (2 weeks) 	Formative assessments to take place at the end of each unit test with opportunities to respond to feedback.	that all homework is cross referenced and completed on google classroom Encourage and help their child to
	Summative assessment once a term covering all previous topics taught to	remember key terms Ensure
· Mock exam prep	ensure good recall and practice.	that their child is working through the Edexcel Revision guides/ Workbooks
	reasoning (2 weeks) Similarity & congruency (2 weeks) Trigonometry 2 (2	reasoning (2 weeks) Similarity & congruency (2 weeks) Formative assessments to take place at the end of each unit test with opportunities to respond to feedback. Trigonometry 2 (2 weeks) Summative assessment once a term covering all previous topics taught to

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Term 2		Mock exams, feedback & review Further statistics (2	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
		weeks)	Formative assessments to take place	that all homework is cross referenced and completed on google
		Equations & graphs (1 week)	at the end of each unit test with opportunities to respond to feedback.	classroom Encourage and help their child to
			Summative assessment once a term	remember key terms Ensure
	·	Circle theorems (1 week)	covering all previous topics taught to ensure good recall and practice.	that their child is working through the Edexcel
				Revision guides/ Workbooks

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Term 3	· More algebra (2 weeks)	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	· Vectors (2 weeks)		
			that all homework is cross
			referenced and completed on
		Formative assessments to take place	google
		at the end of each unit test with	classroom
	Fuene and another	opportunities to respond to feedback.	Encourage
	· Exam preparation		and halp their shild to
			and help their child to
		Commence the commence of the man	remember key terms Ensure
		Summative assessment once a term	Liisuie
		covering all previous topics taught to	that their child is working
		ensure good recall and practice.	through the
			Edexcel
			Revision guides/ Workbooks
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Term 4	Exam, feedback & review	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
	Proportion (2 weeks)	Formative assessments to take place	that all homework is cross referenced and completed on google
	Revision & past	at the end of each unit test with	classroom
	papers	opportunities to respond to feedback.	Encourage
			and help their child to remember key terms
		Summative assessment once a term covering all previous topics taught to	Ensure
		ensure good recall and practice.	that their child is working through the
			Edexcel
			Revision guides/ Workbooks

Term 5	· Revision & past papers	Google classroom - With extended learning opportunities such as Dr.Frost.	Engage with Dr.Frost with their child Ensure
		Formative assessments to take place at the end of each unit test with opportunities to respond to feedback. Summative assessment once a term covering all previous topics taught to ensure good recall and practice.	that all homework is cross referenced and completed on google classroom Encourage and help their child to remember key terms Ensure that their child is working through the Edexcel Revision guides/ Workbooks

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. 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.

The Higher course will prepare our students for the A level should they wish to continue with this. Both courses will ensure students are able to access the various subjects at A level should they achieve their Grade 4 and above.

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.