Curriculum Intent:

In Maths, IT & Computing, our aims are for all students;

- To have a passion for and resilience towards Maths, IT and Computing
- To develop strong problem solving, digital literacy and numeracy skills
- To be able to communicate their learning in Maths, IT and Computing effectively
- To be aware of E-Safety and how to report concerns and keep themselves safe & healthy online
- To gain qualifications to best prepare students for life after Fullbrook

Maths: Implement	of work in Year 7 & 8 to create a greater depth of understanding. SoW was developed and agreed collaboratively, based on staff feedback
	rder topics from Y7-8 stretched further, to prepare for the CGSE course
	ts one full cycle at the beginning of Y10, finishing at Christmas of Y11, to leave plenty of time for revision
	collaboratively on designing thought-provoking and meaningful 100-minute lesson plans that follow the learning cycle
	sments to be re-designed to reflect new SoW, but also new assessment format, with 20 marks multiple choice at the start
	ers entered into the Edexcel Entry Awards to provide opportunities to experience success
	Sheets, highlighted so students can clearly see what they are doing well on and what they need to work on. Students respond to this (by completing
	n Solving within lessons
	ngs to discuss pedagogy with a focus on Problem Solving and mathematical communication
	allenges
	Maths offered in Year 10 & 11
	nge in tutor time every cycle
	eam Maths Challenge
	only to mark formative and summative assessment points, but not mark books, to reduce workload and be more beneficial to the students.
	to encourage the students to make more accurate and detailed notes
	uccess to help support disadvantaged students
	s attend Maths Hubs courses for latest pedagogy
	regularly take place in the form of starters in lessons and through Open books tests, Assessments, End of Year Tests and Mocks
	ulary – Tier 3 Vocabulary taught and recorded in students' books using purple D.V.I. sheets
	h topic on SoW and learning logs (which are put in the students' books)
	rtance of vocab in Maths Teaching & Learning meetings



		Terr	n 1		Term 2				Term 3		
Year 7	Half Term 1 Half Ter		Term 2	Half T	erm 3	Half T	erm 4 Half		Term 5	Half Term 6	
	[12 le	ssons]	[12 lessons]		[10 lessons]		[11 lessons]		[10 lessons]		[10 lessons]
Торіс	Factors, Multiples, Primes	Negative Numbers	Algebraic Expressions	Measuring Space	Calculations	Rounding and Estimating	Representing Data	Averages	Fractions	Perimeter, Area, Volume	Constructions
Skill	Number	Number	Algebra	Geometry	Number	Number	Statistics	Statistics	Number	Geometry	Geometry
Content Prior	 Finding Factors Finding Multiples Identifying primes, squares and cubes Product of Prime Factors HCF LCM 	 Ordering negatives, Addition, Subtraction, Multiplication, Division with negatives Worded examples 	 Collecting like term Substitution, multiplying expressions, expanding brackets, factorising 	 Measuring lines Measuring angles Reading scales Telling the time Calculations with time Converting units 	 Place Value Column addition Column subtraction Multiplication Division Calculations with decimals BIDMAS 	 Rounding to decimals places Rounding to significant figures Estimating calculations Upper and Lower Bounds 	 Types of data Bar Charts Dual Bar Charts Pie Charts Frequency Tables Line Graphs Scatter Graphs 	 Mean, median, mode, range Averages from a frequency table Comparing two sets of data 	 Simplify Fractions Multiply and divide fractions Add and subtract fractions Order Fractions Mixed Numbers Shade a fraction 	 Perimeter and Area of rectangle, triangle, parallelogram, trapezium Volume of prisms Area and circumference of circle Surface Area of cuboid Area by counting 	 Construct ASA, SAS, SSS triangles Construct equilateral triangles, perpendicular bisectors and angle bisectors Basic loci Measuring angles
Knowledge Required	basic arithmetic		negatives					BIDMAS	on a picture	squares	
Feedback Points		Skills Check	ASSESSMENT POINT 1	Skills Check		Skills Check		Skills Check		ASSESSMENT POINT 2	
Direct Vocab Instruction	Multiple Factor Divisible Prime number Square number Cube number Product of Prime Factors	Negative Number Integer Zero Ascending Descending Increase Decrease Inequality	Algebra, algebraic, algebraically Symbol Expression Variable Substitute	Length, distance Mass, weight Volume Capacity Metre, centimetre, millimetre Tonne, kilogram, gram, milligram Litre, millilitre Hour, minute, second	Addition Subtraction Sum, Total Difference, Minus, Less Operation Multiply, Multiplication, Times, Product Commutative Factor Divide, Division, Divisible	Round Approximate Estimate Decimal place Significant figure Lower bound Upper bound	Categorical, Discrete, Continuous Frequency table Tally Bar Chart Line Graph Graph, Scale, Axis Line Graph Scatter Graph Correlation Pie Chart	Average Mean Median Mode, Modal, Bimodal Measure Data Statistic	Fraction Proper / Improper Top Heavy Simplify, cancel, lowest terms Mixed Numbers Equivalent Numerator Denominator	Area Perimeter Surface area Volume Square, rectangle, parallelogram, trapezium, rhombus, Diameter Radius Circumference	Plane Parallel Perpendicular Equilateral Sketch Construct Bisect Side, Angle Scale Bearing
Standardised Homework	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx	Sparx

		Ter	m 1			Term 2		Term 3			
Year 8	Half T	erm 1	Half	Term 2	Half Term 3	Half Term 4		Half Term 5		Half Term 6	
	[12 les	sons]	[12]	essons]	[10 lessons]	[11 le	ssons]	[10 le	ssons]	[10 le	ssons]
Торіс	FDP	Percentages	Equations	Angles	Ratio	Compound Measures	Probability	Sequences	Algebraic Graphs	Right Angled Triangles	Transformations
Skill	Number	Number	Algebra	Geometry	Proportion	Proportion	Statistics	Algebra	Algebra	Geometry	Geometry
Content	 Convert between equivalent Fractions, Decimals and Percentages Change a fraction into a recurring decimal Change a recurring decimal into a fraction 	 Find % of an amount Increase or decrease by a % Express as a % Use decimal multipliers Solve finance problems with interest 	 Solve linear equations (one step, two step, x on both sides) Substitute numbers into formulae Change subject of formulae 	 Apply basic angle facts, around a point, straight line, in a triangle Angles in parallel lines Angles in polygons 	 Write a ratio Simplify ratio Divide amount into a ratio Ratio given one part Ratio given difference Best Buys Currency Conversions Direct proportion 	 Speed Density 	 Probability scale Equally likely outcomes Probabilities add up to 1 Sample Space Diagrams Relative Frequency Tree Diagrams 	 Missing term Term to term rules Nth term (linear) Generating sequences Using nth term 	 Plot coordinates Plot a straight line from a table of values Find gradient y = mx + c 	 Identify Hypotenuse Pythagoras to find hypotenuse Pythagoras to find shorter side Label a triangle SOH CAH TOA to find a missing length 	 Lines of symmetry Reflection Rotation Translation Enlargement
Prior	Fractions	FDP	Collecting like	Measuring an	Basic arithmetic	Basic arithmetic,	Fractions	Substitution	Substitution	Substitution,	Coordinates
Knowledge			terms, expand	angle	and fractions	Measuring time				squaring	
Required		ACCECCAENT	bracket	Ckille Check		Skille Check		Ckille Check	Αςςεςελάξητ		Skille Check
Points		POINT 1		Skills Check		Skills Check		Skills Check	POINT 2		Skills Check
Direct Vocab Instruction	Convert Equivalent Recurring Reciprocal Irrational number	Multiplier Simple Interest Compound interest Profit Depreciation Increase Decrease	Equation Formulae Substitute Variable Re-arrange Subject Linear Quadratic	Opposite, alternate, corresponding, interior, exterior, Polygon Congruent Acute, obtuse, reflex Parallel, perpendicular Equilateral, isosceles, right-angle	Proportion Ratio Scale Simplify Currency Exchange Rate Direct Proportion Inverse Proportion	Gradient Speed Velocity Kilometres, Metres, Miles Conversion Acceleration Mass Density Volume	Bias Mutually exclusive Relative Frequency Independent and dependent events Sample Tree diagram Outcome	Pattern Sequence Linear Term Ascending Descending Term-to-term rule Position-to-term rule n th term	Plot Equation (of a graph) Function Formula Linear Coordinate plane Gradient y-intercept Substitute Quadratic	Angle Hypotenuse Adjacent Opposite Sine (sin) Cosine (cos) Tangent (tan) Right angle Pythagoras Trigonometry	Axis, axes, x-axis, y-axis Origin Translation Reflection Rotation Enlargement Transformation Object, Image Congruent Mirror line
Standardised Homework	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch

		Ter	m 1		Term 2				Term 3		
Year 9	Half Term 1 Half Term 2		erm 2	Half Term 3	Half T	Ferm 4	Half Term 5 Half Term		erm 6		
	[12 les	sons]	[12 les	sons]	[10 lessons]	[11 le	ssons]	[10 lessons]		[10 lessons]	
Торіс	Number, Powers, Error	Algebra	Equations	Angles	Direct and Inverse Proportion	Data and Probability	Fractions	Sequences and Algebraic Graphs	Pythagoras, Trig, Vectors	Perimeter, Area, Volume	Similar Shapes
Skill	Number	Algebra	Algebra	Geometry	Proportion	Statistics	Number	Algebra	Geometry	Geometry	Geometry
Content	 Multiplying & Dividing Decimals Indices Laws Standard Form Negative and Fractional Indices Surds Upper/Lower Bounds 	 Expanding Brackets Collecting Like Terms Simplifying with Indices Factorising Completing the Square 	 Solving linear equations Solving Quadratics by Factorising Quadratic Formula Changing the subject Inequalities 	 Angles in parallel lines Angles in polygons Circle Theorems Bearings 	 Solve direct and inverse proportion problems Solve recipe problems Use conversion graphs Convert currency 	 Probability Two Way Tables Venn Diagrams Tree Diagrams 	 Consolidate all fraction skills from Year 7 Convert recurring decimal to fraction Work with algebraic fractions 	 Linear sequences Geometric sequences Quadratic sequences Recognise and plot graphs Find gradient Y = mx + c 	 Pythagoras, 3D SOH CAH TOA 3D Sine Rule and Cosine Rule (acc. only) Adding column vectors Drawing vector diagrams 	 Consolidate perimeter and area Arcs and Sectors Volume of prisms, cylinders, cones, pyramids Surface area of a cylinder 	 Finding a scale factor Identifying congruent and similar shapes Find a missing length on a similar shape Areas and volumes
Prior Knowledge Required	Squaring and Cubing	Simplifying expressions	Inverse operations, factorising	Basic angle facts	Substitution	Plotting coordinates, probability scale	Fraction skills from Y7	Nth term from Y8	Pythagoras SOH CAH TOA	Perimeter and area of rectilinear shapes and circles	Proportion
Feedback Points			Open Book Test 1		ASSESSMENT 1		Open Book Test 2		ASSESSMENT 2		
Direct Vocab Instruction	Inequality Root Powers, Indices BIDMAS Reciprocal Estimate Significant figures Rounding Product Prime HCF, LCM Standard form Bound Error interval	Expression Coefficient Formula Inequality Term Identity Simplify Expand Factorise Substitute Rearrange Subject Function Input, Output	Solve Equation Unknown Expand Inequality Factorise Quadratic Linear Simultaneous Solution	Opposite Alternate Corresponding Interior Exterior Polygon Congruent Similar Bearing Proof Radius Tangent Chord Diameter	Directly Proportional Inversely Proportional Exchange rate Currency Distance Speed Time Density Pressure Capacity Compound units	Discrete Continuous Grouped data Population Sample Bias Frequency Correlation Outlier Line of best fit Interpolate Extrapolate Cumulative Frequency density	Fraction Numerator Denominator Reciprocal Ascending Descending Mixed number Improper Recurring	Sequence Term Consecutive Fibonacci Linear Geometric Common ratio Quadratic Common difference Gradient Intercept Root Reciprocal	Hypotenuse Adjacent Opposite Vector Scalar Parallel Vector	Area Perimeter Volume Compound shape Surface area Arc Sector Radius Diameter Circumference Sphere Prism Pyramid Cone	Congruent Similar Scale Factor Length Area Volume
Standardised Homework	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch	MathsWatch

		Ter	m 1		Term 2				Term 3		
Year 10	Half Term 1 Half Term 2		erm 2	Half Term 3 Half Term 4 Ha				alf Term 5 Half Term 6			
	[12 les	sons]	[12 les	sons]	[10 lessons]	[11 le	ssons]	[10 le	ssons]	[10 le:	ssons]
Торіс	Number, Powers, Error	Algebra	Representing Data	Averages	Transformations & Constructions	Ratio	Percentages	Fractions	Sequences	Proportion & Compound Measures	Solving Equations
Skill	Number	Algebra	Statistics	Statistics	Geometry	Proportion	Number	Number	Algebra	Proportion	Algebra
Content	 Multiply & Divide Decimals Indices Laws Standard Form Negative and Fractional Indices Surds Upper and Lower Bounds 	 Expanding Factorising Indices Completing the Square Inverse Functions Composite Functions 	 Freq Polygon Pie Chart Cumulative Frequency Box Plot Histogram Scatter Graph 	 Averages from Freq tables Averages from graphs Combined means Comparing data 	 Reflection Rotation Translation Enlargement Invariant Points Combinations Constructions Loci 	 Sharing quantities in a ratio Combining ratios Scaling ratios and solving problems Link ratios and equations 	 % Change Reverse Percentages Profit and loss Compound Interest Successive % Change 	 Find reciprocal Manipulate Fractions Recurring decimals to fractions Add, multiply, simplify algebraic fractions 	 Linear sequences Geometric sequences Quadratic sequences 	 Direct/inverse proportion Recognise graphs Best Buys Currency Conv. Speed, Density, Pressure Area under curve Instant. Rate of change 	 Linear equations Quadratic equations (factorise, formula, complete square) Iteration Linear Inequalities Quadratic Inequalities
Prior Knowledge Required	Decimals Squaring, cubing, powers	Simplifying algebra	Bar Charts	Averages from raw data	Transformations from Y8	Simplify Ratio	% of amounts Multipliers	Fractions arithmetic	Nth term linear	Gradient	Inverse Operations Factorising
Feedback	poneio	ASSESSMENT 1		Open Book		Open Book Test 2		Open Book Test 3		ASSESSMENT 2	
Points				Test 1							
Direct Vocab Instruction	Inequality Root Indices BIDMAS Reciprocal Estimate Significant figures Product Prime HCF, LCM Standard form Bound Error interval	Expression Coefficient Formula Inequality Term Identity Simplify Expand Factorise Substitute Rearrange Subject Composite Function	Discrete Continuous Population Sample Bias Frequency Correlation Outlier Line of best fit Interpolate Extrapolate Cumulative Frequency density	Grouped Data Mean Median Mode Range Interquartile Range Outlier Class interval Frequency	Rotate Translate Enlarge Reflect Scale Factor Object Image Construct Congruent Similar Perpendicular Bisect Locus Invariant	Ratio Multiple LCM Scale	Fraction Percentage Increase Decrease Profit Simple interest Compound interest	Fraction Numerator Denominator Reciprocal Ascending Descending Mixed number Improper Recurring	Sequence Term Consecutive "Fibonacci-type sequence" Linear Geometric Common ratio Quadratic Common difference	Directly Proportional Inversely Proportional Exchange rate Currency Speed Density Pressure Velocity Acceleration Tangent Instantaneous rate of change	Solve Equation Unknown Expand Inequality Factorise Quadratic Linear Simultaneous Solution
Standardised	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/	MathsWatch/
Homework	Exam Questions	Exam Qs	Exam Questions	Exam Qs	Exam Questions	Exam Questions	Exam Questions	Exam Questions	Exam Questions	Exam Questions	Exam Questions

		Т	erm 1			Term 2			Term 3			
Year 11	Half Term 1		Half Term 2		Half Term 3 Half Te		Ferm 4	Half T	erm 5	Half Term 6		
	[12 les	sons]	[12 less	ons]	[10 lessons] [11 lessons]		ssons]	[10 lessons]		[10 lessons]		
Торіс	Pythagoras, Trigonometry, Vectors	Probability	Algebraic Graphs	MOCKS	Angles	Perimeter, Area, Volume	Similar Shapes	REVISION	REVISION		-	
Skill	Geometry	Statistics	Algebra		Geometry	Geometry	Proportion					
Content	 Pythagoras SOHCAHTOA Exact Trig Values Sine and Cosine Rules ½abSinC 3D Trig and Pythagoras Trig Graphs Vector problems Proving lines are parallel 	 Frequency Trees Two way tables Venn Diagrams Set notation Relative Frequency Tree Diagrams Conditional Probability 	 Y = mx + c Plot non-linear graphs Identify roots, intercepts and turning points Graph Transformations 	•	 Angles in parallel lines Angles in polygons Circle Theorems Bearings Congruent shapes Proof of congruency 	 Arcs and Sectors Volume of prisms, cylinders, cones, pyramids Surface area of a cylinder Surface Area of a cone Volume of a frustum 	 Find missing lengths Show shapes are similar Convert units of area and volume Lengths, areas, volumes in 2D and 3D similar shapes 					
Prior Knowledge	Pythagoras, SOH CAH TOA	Tree Diagrams, Venn Diagrams			Angles in Parallel Lines, Angles in	Area and Volume of shapes	Similar and congruent					
Feedback Points		Open Book Test		MOCKS	polygons	MOCKS	definitions					
Direct Vocab Instruction	Hypotenuse Adjacent Opposite Sine Cosine Tangent Vector Scalar Parallel	Experimental Theoretical Mutually exclusive Mutually exhaustive Trial Sample space Outcome Venn diagram Independent Dependent Union Intersect Complement	Midpoint Gradient Intercept Function Root Turning point/Vertex Solution Quadratic Cubic Reciprocal		Opposite Alternate Corresponding Interior Exterior Polygon Congruent Similar Bearing Proof Radius Tangent Chord Diameter	Area Perimeter Volume Compound shape Surface area Arc Sector Radius Diameter Circumference Sphere Prism Pyramid Cone	Congruent Similar Scale Factor Length Area Volume					
Standardised	Exam	Exam	Exam Questions,	Exam	Exam	Exam	Exam					
Homework	Questions,	Questions,	GCSE Papers	Questions,	Questions,	Questions,	Questions,					
	GCSE Papers	GCSE Papers		GCSE Papers	GCSE Papers	GCSE Papers	GCSE Papers					