

Year 13	Intent		Implementation		Impact	
Half term topics	Taught curriculum (teacher Led)	Learned curriculum (student Led)	Key skills demonstrated	Suggested wider activities including extra-curricular opportunities	Summative assessment Title/type	Assessment criteria
1	Proof:	Dr Frost Oak Academy Maths genie Corbett maths Emporium edexcel A level revision Revision world You tube	Proof by deductions and by induction	Maths clubs Maths trip Puzzles University visit	Weekly Homework End of term assessment Mock exam	OT1: Language and proof. OT1.1 Construct and present mathematical arguments through appropriate use of diagrams; sketching graphs; logical deduction; precise statements involving correct use of symbols and connecting language, including: constant, coefficient, expression, equation, function, identity, index, term, variable

Curriculum Assessment map A level -2022-2023

2	Algebraic and partial fractions		Simplifying algebraic fractions. Partial fractions.		Weekly Homework End of term assessment Mock exam	OT1.2. Understand and use mathematical language and syntax as set out in the content
3	Functions and modelling	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel A level revision Revision world	Modulus Functions. Composition and inverse functions.	5	Weekly Homework End of term assessment. Mock exam	OT1.3. Understand and use language and symbols associated with set theory, as set out in the content. Apply to solutions of inequalities. OT1.5. Comprehend and critique mathematical arguments, proofs and justifications of methods and formulae, including those relating to applications of mathematics.
4.	Functions and Modelling		Transformation. Modelling with function examples may be trigonometric or reciprocal etc.			

Curriculum Assessment map A level -2022-2023

5	Serie and sequences		<p>Arithmetic and geometric progressions (proofs of 'sum formulae').</p> <p>Sigma notation.</p> <p>Recurrence and iterations.</p>			
6	The binomial Theorem	<p>Century tech Oak Academy Maths genie Corbett maths Emporium edexcel Alevel revision Revision world</p>	<p>Expanding $(a + bx)^n$ for rational n; knowledge of range of validity .</p> <p>Expansion of functions by first using partial fractions</p>		<p>Weekly Homework End of term assessment. Mock exam</p>	
Half term						

Curriculum Assessment map A level -2022-2023

7	Trigonometry		<p>\Radians (exact values), arcs and sectors</p> <p>Small angles</p> <p>Secant, cosecant and cotangent (definitions, identities and graphs);</p> <p>Inverse trigonometrical functions; Inverse trigonometric functions</p> <p>Compound* and double (and half) angle formulae</p>			
8	Trigonometry	<p>Century tech</p> <p>Oak Academy</p> <p>Maths genie</p> <p>Corbett maths</p> <p>Emporium edexcel</p> <p>A level revision</p> <p>Revision world</p>	<p>Geometric proofs expected</p> <p>$R \cos(x \pm \alpha)$ or</p> <p>$R \sin(x \pm \alpha)$</p> <p>Proving trigonometric identities</p>			

Curriculum Assessment map A level -2022-2023

			Solving problems in context (e.g. mechanics)			
9	Parametric Equation		Definition and converting between parametric and Cartesian forms. Curve sketching and modelling.			
10						
11	Differentiation		Differentiating $\sin x$ and $\cos x$ from first principles. Differentiating exponentials and logarithms. Differentiating products, quotients, implicit and parametric functions.		Weekly Homework End of term assessment	
12	Differentiation		Second derivatives (rates of change of			

Curriculum Assessment map A level -2022-2023

			<p>gradient, inflections) Rates of change problems* (including growth and kinematics)</p>			
13	Numerical methods		<p>Location of roots Solving by iterative methods (knowledge of 'staircase and cobweb' diagrams). Newton-Raphson method. Problem solving .</p>			
14	Integration part 1		<p>Integrating x^n (including when $n = -1$), exponentials and trigonometric functions Using the reverse of differentiation, and using trigonometric identities to</p>			

Curriculum Assessment map A level -2022-2023

			manipulate integrals			
15	Integration part 2		Integration by substitution Integration by parts			
16	Integration part2		Use of partial fractions Areas under graphs or between two curves, including understanding the area is the limit of a sum (using sigma notation)			
17	Integration Part 2		The trapezium rule. Differential equations (including knowledge of the family of solution curves)			

Curriculum Assessment map A level -2022-2023

18	Vectors (3D)		Use of vectors in three dimensions; knowledge of column vectors and i, j and k unit vectors			
Statistic	STATISTICS					
20	Regression and correlation		Change of variable. Correlation coefficients. Statistical hypothesis . testing for zero correlation.		Weekly Homework End of term assessment	
21	Probability		Using set notation for probability Conditional probability Questioning assumptions in probability			

Curriculum Assessment map A level -2022-2023

22	The Normal Distribution	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel A level revision Revision world You tube	Understand and use the Normal distribution Use the Normal distribution as an approximation to the binomial distribution			OT2.1 Recognise the underlying mathematical structure in a situation and simplify and abstract appropriately to enable problems to be solved
22	The Normal Distribution		Selecting the appropriate distribution Statistical hypothesis testing for the mean of the Normal distribution			OT2.2 Construct extended arguments to solve problems presented in an unstructured form, including problems in context.
Mechanics	Mechanics		Mechanics			
23	Moments		Forces' turning effect			OT2.3 Interpret and communicate solutions in the context of the original problem
24	Forces at any angle		Resolving forces. Friction forces (including coefficient of friction μ)			OT2.5 Evaluate, including by making reasoned estimates, the accuracy or limitations of solutions.

Curriculum Assessment map A level -2022-2023

25	Applications of kinematics		Projectiles			
26	Applications of forces		Equilibrium and statics of a particle (including ladder problems). Dynamics of a particle.			OT2.6 Understand the concept of a mathematical problem-solving cycle, including specifying the problem, collecting information, processing and representing information and interpreting results, which may identify the need to repeat the cycle
26	Further kinematics		Variable acceleration (use of calculus and finding vectors \dot{r} and \ddot{r} at a given time)			OT2.7 Understand, interpret and extract information from diagrams and construct mathematical diagrams to solve problems, including in mechanics.
27						

Curriculum Assessment map A level -2022-2023

						O.T.3.Mathematical modelling
28						O.T.3.1.Translate a situation in context into a mathematical model, making simplifying assumptions.
29						OT3.2 Use a mathematical model with suitable inputs to engage with and explore situations (for a given model or a model constructed or selected by the student).
						OT3.3 Interpret the outputs of a mathematical model in the context of the original situation (for a given model or a model constructed or selected by the student).

Curriculum Assessment map A level -2022-2023

30						
31						OT3.4 Understand that a mathematical model can be refined by considering its outputs and simplifying assumptions; evaluate whether the model is appropriate.
32						OT3.5 Understand and use modelling assumptions.
33					Weekly Homework End of term assessment	
34						

Curriculum Assessment Map

Subject: Maths

Year 12	Intent		Implementation		Impact	
Half term topics	Taught curriculum (teacher Led)	Learned curriculum (student Led)	Key skills demonstrated	Suggested wider activities including extra-curricular opportunities	Summative assessment Title/type	Assessment criteria
1	Algebra and function	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel A level revision Revision world	Algebraic expressions – basic algebraic manipulation, indices and surds Quadratic functions – factorising, solving, graphs and the discriminants.	Maths clubs Maths trip Puzzles University visit	Weekly Homework End of term assessment Mock exam	OT1: Language and proof. OT1.1 Construct and present mathematical arguments through appropriate use of diagrams; sketching graphs; logical deduction; precise statements involving correct use of symbols and connecting language,

Curriculum Assessment map As level -2022-2023

						including: constant, coefficient, expression, equation, function, identity, index, term, variable
2	Algebra and function		Equations – quadratic/linear simultaneous. Inequalities – linear and quadratic (including graphical solutions)		Weekly Homework End of term assessment	OT1.2. Understand and use mathematical language and syntax as set out in the content

Curriculum Assessment map As level -2022-2023

3	Algebra function	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel Alevel revision Revision world	Inequalities – linear and quadratic (including graphical solutions) Graphs – cubic, quartic and reciprocal Transformation-Trans forming graphs -f(x) notation	5	Weekly Homework End of term assessment	OT1.3. Understand and use language and symbols associated with set theory, as set out in the content. Apply to solutions of inequalities. OT1.5. Comprehend and critique mathematical arguments, proofs and justifications of methods and formulae, including those relating to applications of mathematics.
4.	Coordinate geometry in the (x,y) plane		Straight-line graphs, parallel/perpendicular , length and area problems			
5	Coordinate geometry in the (x,y) plane		Circles – equation of a circle, geometric problems on a grid			

Curriculum Assessment map As level -2022-2023

6	Further Algebra	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel Alevel revision Revision world	Algebraic division, factor theorem and proof		Weekly Homework End of term assessment	
Half term						
7	Further Algebra		Algebraic division, factor theorem and proof			
8	Further Algebra	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel A level revision Revision world	The binomial expansion			.
9	Trigonometry		Trigonometric ratios and graphs			.

Curriculum Assessment map As level -2022-2023

10	Trigonometry		Trigonometric identities and equations			
11	Trigonometry		Trigonometric identities and equations		Weekly Homework End of term assessment	
12	Vectors (2D)		Definitions, magnitude/direction, addition and scalar multiplication			
13	Vectors (2D)		Position vectors, distance between two points, geometric problems			
14	Vectors (2D)					
15	Differentiation		Definition, differentiating polynomials, second derivatives			
16	Differentiation		Gradients, tangents, normal, maxima and minima			
17	Integration		Definition as opposite of differentiation, indefinite integrals of x^n			

Curriculum Assessment map As level -2022-2023

18	Integration		Definite integrals and areas under curves			
19	Exponential and logarithms	Century tech Oak Academy Maths genie Corbett maths Emporium 20edexcel Alevel revision Revision world	Exponential functions and natural logarithms			
20	Exponential and Logarithms		Exponential functions and natural logarithms		Weekly Homework End of term assessment	
						OT2: Problem Solving
21	Statistical sampling	Century tech Oak Academy Maths genie Corbett maths Emporium edexcel Alevel revision Revision world	Introduction to sampling terminology; Advantages and disadvantages of sampling. Understand and use sampling techniques; Compare sampling techniques in context			OT2.1 Recognise the underlying mathematical structure in a situation and simplify and abstract appropriately to enable problems to be solved

Curriculum Assessment map As level -2022-2023

22	Data presentation and interpretation		Calculation and interpretation of measures of location; Calculation and interpretation of measures of variation; Understand and use coding			OT2.2 Construct extended arguments to solve problems presented in an unstructured form, including problems in context.
23			Interpret diagrams for single-variable data; Interpret scatter diagrams and regression lines; Recognise and interpret outliers; Draw simple conclusions from statistical problems			OT2.3 Interpret and communicate solutions in the context of the original problem
24	Probability:		Mutually exclusive events; Independent events			OT2.5 Evaluate, including by making reasoned estimates, the accuracy or limitations of solutions.
25	Statistical distributions:		Use discrete distributions to model real-world situations;			

Curriculum Assessment map As level -2022-2023

			Identify the discrete uniform distribution; Calculate probabilities using the binomial distribution (calculator use expected)			
	Statistical distributions		Use discrete distributions to model real-world situations; Identify the discrete uniform distribution; Calculate probabilities using the binomial distribution (calculator use expected)			OT2.6 Understand the concept of a mathematical problem-solving cycle, including specifying the problem, collecting information, processing and representing information and interpreting results, which may identify the need to repeat the cycle
26	Statistical hypothesis testing		Language of hypothesis testing; Significance levels			OT2.7 Understand, interpret and extract information from diagrams and

Curriculum Assessment map As level -2022-2023

						construct mathematical diagrams to solve problems, including in mechanics.
27	Statistical hypothesis testing		Carry out hypothesis tests involving the binomial distribution			
	Section B – Mechanics					O.T.3.Mathematical modelling
28	Quantities and units in mechanics		Introduction to mathematical modelling and standard S.I. units of length, time and mass. Definitions of force, velocity, speed, acceleration and weight and displacement; Vector and scalar quantities			O.T.3.1.Translate a situation in context into a mathematical model, making simplifying assumptions.
29	Kinematics 1 (constant acceleration)		Graphical representation of			OT3.2 Use a mathematical

Curriculum Assessment map As level -2022-2023

			velocity, acceleration and displacement			model with suitable inputs to engage with and explore situations (for a given model or a model constructed or selected by the student).
	Kinematics 1 (constant acceleration)		Motion in a straight line under constant acceleration; <i>suvat</i> formulae for constant acceleration; Vertical motion under gravity			OT3.3 Interpret the outputs of a mathematical model in the context of the original situation (for a given model or a model constructed or selected by the student).
30	Forces & Newton's laws		Newton's first law, force diagrams, equilibrium			
31	Forces & Newton's laws		, introduction to \mathbf{i}, \mathbf{j} system			OT3.4 Understand that a mathematical model can be refined by

Curriculum Assessment map As level -2022-2023

						considering its outputs and simplifying assumptions; evaluate whether the model is appropriate.
32	Forces & Newton's laws		Newton's second law, ' $F = ma$ ', connected particles (no resolving forces or use of $F = \mu R$); Newton's third law: equilibrium, problems involving smooth pulleys			OT3.5 Understand and use modelling assumptions.
33	Kinematics 2 (variable acceleration)		Variable force; Calculus to determine rates of change for kinematics		Weekly Homework End of term assessment	
			Use of integration for kinematics problems i.e. $r = \int v dt, v = \int a dt$			
34	revision					



Curriculum Assessment map As level -2022-2023

Curriculum Assessment Map

Subject: Maths

GCSE Resit	Intent		Implementation		Impact	
	Taught curriculum (teacher Led)	Learned curriculum (student Led)	Key skills demonstrated	Suggested wider activities including extra-curricular opportunities	Summative assessment Title/type	Assessment criteria
Half term1 topics						
1	Volume	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE .maths. Student book. Century Tech extra resources Oak National academy</p>	<p>Compare lengths, areas and volumes using ratio notation: Scale factors: <u>Make links to similarity.</u></p> <p>Know and apply the formula to calculate the volume of cuboids and other right prisms (including cylinders).</p> <p>Calculate the volume of spheres, pyramids, cones</p>	<p>Maths club Puzzles Maths in real life Trip Wider applications of maths</p>	<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self-evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			and composite solids. <u>including frustums</u> <u>Calculate exactly with multiples of</u> <u>'pi'</u>			
--	--	--	---	--	--	--

2	<p>Algebra: Quadratics rearranging the formulae and identities</p>	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book. Oak National academy</p>	<p>Simplify and manipulate algebraic expressions (<u>including those involving surds</u>) by: <u>expanding products of two or more binomials</u>: <u>factorising quadratic expressions of the form $ax^2 + bx + c$</u> <u>including the difference of two squares</u>. Factorising quadratic expressions of the form $ax^2 + bx + c$ simplifying expressions</p>	<p>Maths club Puzzles Maths in real life Trip Wider applications of maths</p>	<p>Homework past paper for two weeks. Use of Century tech for homework and to monitor progress. Students self evaluation through RAG Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>
---	--	---	---	---	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			involving sums, products and powers, including the laws of indices			
3	Algebra: Quadratics rearranging the formulae and identities	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book. Oak National academy</p>	<p>Understand and use standard mathematical formulae.</p> <p>including use of formulae from other subjects in words and using symbols.</p> <p>Rearrange formulae to change the subject.</p>	<p>Maths club Puzzles Maths in real life Trip Wider applications of maths</p>	<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p><u>Know the difference between an equation and an identity</u></p> <p><u>Argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments and proofs</u></p> <p>Where appropriate, interpret simple expressions as functions with</p>			
--	--	--	--	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p>inputs and outputs</p> <p>Interpret the reverse process as the 'inverse function'</p> <p>Interpret the succession of two functions as a composite function'</p> <p>'understand and use function notation: $f(x)$, $fg(x)$, $f^{-1}(x)$ is expected at higher tier</p>			
--	--	--	---	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

4	Scatter Graph	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book. Oak National academy</p>	<p>Use and interpret scatter graphs of bivariate data</p> <p>Recognise correlation <u>and know that it does not indicate causation</u></p> <p><u>Draw estimated lines of best fit</u> <u>.Make predictions</u> <u>Interpolate and extrapolate</u> <u>apparent trends</u> <u>whilst knowing the</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p><u>dangers of doing so</u></p> <p>know and understand the terms positive correlation, negative correlation, no correlation, weak correlation and strong correlation</p>			
5	Numerical Methods	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book. Oak National academy</p>	<p>Find approximate solutions to equations numerically using iteration</p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts.</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

					Mock exam at the end of the term.	AO3- Interpret and analyse problems and generate strategies to solve them
6	Holiday					
7	equation of a circle	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book. Oak National academy</p>	<p>Recognise and use the equation of a circle with centre at the origin.</p> <p>Find the equation of a tangent to a circle at a given point.</p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content</p> <p>AO2-Select and apply mathematical methods in a range of contexts.</p> <p>AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

8	Further equations and graphs		<p>Solve linear equations in one unknown algebraically <u>including those with the unknown on both sides of the equation</u></p> <p>Find approximate solutions using a graph</p> <p><u>Solve quadratic equations (including those that require rearrangement) algebraically by factorising, by</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	

			<p>completing the square and by using the quadratic formula</p> <p><u>Find approximate solutions using a graph</u></p> <p><u>Recognise, sketch and interpret graphs of linear and quadratic functions</u></p>			
--	--	--	---	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

9	Further equations and graphs		<p><u>Identify and interpret roots, intercepts and turning points of quadratic functions graphically:</u> <u>deduce roots algebraically and turning points by completing the square.</u></p> <p><u>including the symmetrical property of a quadratic</u></p> <p><u>Translate simple situations or procedures into algebraic</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	
---	-------------------------------------	--	--	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<u>expressions or formulae</u> <u>derive an equation, solve the equation and interpret the solution</u> <u>including solution of geometrical problems and problems set in context</u>			
--	--	--	---	--	--	--

Curriculum Assessment Map

Subject: Maths

Year 11 Higher	Intent		Implementation		Impact	
Half term 2 topics	Taught curriculum (teacher Led)	Learned curriculum (student Led)	Key skills demonstrated	Suggested wider activities including extra-curricular opportunities	Summative assessment Title/type	Assessment criteria
10.	Simultaneous equations	Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE .maths. Student book.	<u>Solve two simultaneous equations in two variables (linear / linear or linear/quadratic) algebraically</u> <u>Find approximate solutions using a graph.</u>		Homework past paper for two weeks. Use of Century tech for homework and to monitor progress. Students self evaluation through RAG Mock exam at the end of the term.	AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

11	Simultaneous equations	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book</p>	<p><u>Translate simple situations or procedures into algebraic expressions or formulae</u></p> <p><u>Derive two simultaneous equations.</u></p> <p><u>Solve the equations and interpret the solution</u></p> <p><u>including the solution of geometrical</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content</p> <p>AO2-Select and apply mathematical methods in a range of contexts.</p> <p>AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<u>problems and problems set in context</u>			
12	Mock Revision	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.</p>			<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>

13	Mock Exam and then Christmas holiday					
14	Sketching graph	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.</p>	<p>Recognise, sketch and interpret graphs of linear functions, quadratic functions, <u>simple cubic functions</u> and the <u>reciprocal function</u> $y = \frac{1}{x}$ with $x \neq 0$, exponential functions $y = kx$ for positive values of k, and</p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>

			<p>the trigonometric functions (with arguments in degrees)</p> <p>$y = \sin x, y = \cos x$ and $y = \tan x$</p> <p>for angles of any size</p>			
15	Direct and inverse proportion	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.</p>	<p>Solve problems involving direct and inverse proportion, including graphical and algebraic representations.</p> <p><u>Understand that x is inversely proportional to y is equivalent to x</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content</p> <p>AO2-Select and apply mathematical methods in a range of contexts.</p> <p>AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p>is proportional to $\frac{1}{y}$</p> <p><u>Construct and interpret equations that describe direct and inverse proportion</u></p> <p><u>Recognise and interpret graphs that illustrate direct and inverse proportion</u></p>			
16	Inequalities	<p>Maths genie website. Cobbett maths. Maths box. Century tech.</p>	<p><u>Solve linear inequalities in one or two variables and quadratic</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for</p>	<p>AO1 – Recall and use knowledge of the prescribed content</p> <p>AO2-Select and apply</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

		<p>Collins AQA GCSE maths Student book.</p>	<p>inequalities in one variable.</p> <p>know the conventions of an open circle on a number line for a strict inequality and a closed circle for an included boundary.</p> <p><u>Represent the solution set on a number line,</u> using set notation and on a graph</p> <p>in graphical work the convention</p>		<p>homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>mathematical methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>
--	--	---	--	--	--	---

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			of a dashed line for strict inequalities and a solid line for an included inequality will be required			
--	--	--	--	--	--	--

	Intent		Implementation		Impact	
Half term3 topics	Taught curriculum (teacher Led)	Learned curriculum (student Led)	Key skills demonstrated	Suggested wider activities including extra-curricular opportunities	Summative assessment Title/type	Assessment criteria
17		Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE .maths. Student book.	<u>Know the formula for Pythagoras' Theorem</u> $a^2+b^2=c^2$		Homework past paper for two weeks. Use of Century tech for homework and	AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

		<p>Century Tech extra resources</p>	<p><u>Apply it to find angles and lengths in right angled triangles and, where possible, general triangles in two and three dimensional figures.</u></p> <p><u>Know and use the trigonometric ratios</u></p> $\cos \theta = \frac{\textit{adjacent}}{\textit{hypotenuse}} \textit{ and}$ $\sin \theta = \frac{\textit{opposite}}{\textit{hypotenuse}}$		<p>to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>methods in a range of contexts. AO3- Interpret and analyse problems and generate strategies to solve them</p>
--	--	---	--	--	---	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			$\tan \theta = \frac{\textit{opposite}}{\textit{adjacent}}$			
15		<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book</p>	<p><u>Know the exact values of</u></p> <p>$\sin \theta$ and $\cos \theta =$ <u>of 0°, 30°, 45°, 60° and 90°</u></p> <p><u>Know the exact value of</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	<p>AO1 – Recall and use knowledge of the prescribed content</p> <p>AO2-Select and apply mathematical methods in a range of contexts.</p> <p>AO3- Interpret and analyse problems and generate strategies to solve them</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			$\tan \theta$ for $\theta = 0^\circ$, 30° , 45° and 60°			
16	Pythagoras theorem and basic trigonometry		<u>Apply angle facts,</u> <u>triangle</u> <u>congruence,</u> <u>similarity and</u> <u>properties of</u> <u>quadrilaterals to</u> <u>conjecture and</u> <u>derive results</u>			

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p><u>about angles and sides including Pythagoras' Theorem and use known results to obtain simple proofs.</u></p> <p>Compare lengths using ratio notation; <u>make links to trigonometric ratios</u></p>			
--	--	--	--	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

half-term					<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	
17	Growth and decay	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.</p>	<p><u>Set up, solve and interpret the answers in growth and decay problems, including compound interest and work with</u></p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p>	<p>AO1 – Recall and use knowledge of the prescribed content AO2-Select and apply mathematical methods in a range of contexts. AO3- Interpret and analyse problems and</p>

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			general iterative processes		Mock exam at the end of the term.	generate strategies to solve them
18	Vectors	Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.	<u>Apply addition and subtraction of vectors.</u> <u>multiplication of vectors by a scalar, and</u> <u>diagrammatic and column representation of vectors</u>			

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

19	Vectors	Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book.	Use vectors to construct geometric arguments and proofs		Homework past paper for two weeks. Use of Century tech for homework and to monitor progress. Students self evaluation through RAG Mock exam at the end of the term.	
20	Transforming functions		Sketch translations and reflections of a given function			
21	Cosine and sine rule	Maths genie website. Cobbett maths. Maths box.	Know and apply the Sine rule		Homework past paper for two weeks.	

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

		<p>Century tech. Collins AQA GCSE maths Student book</p>	$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ <p>and Cosine rule</p> $a^2 = b^2 + c^2 - 2bc \cos A$ <p>to find unknown lengths and angles</p>		<p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	
22	Cosine and sine rule	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book</p>	<p>Know and apply</p> $= \frac{1}{2} abs \sin C$ <p>to calculate the area, sides or</p>			

			angles of any triangle			
23	Circle theorems	<p>Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book</p>	<p>Apply and prove the standard circle theorems concerning angles, radii, tangents and chords and use them to prove related results.</p> <p>including</p> <p>angle at centre is equal to twice angle at circumference;</p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress. Students self evaluation through RAG</p> <p>Mock exam at the end of the term.</p>	

			<p>angle in a semi-circle is 90°;</p> <p>angles in the same segment are equal;</p> <p>opposite angles in a cyclic quadrilateral sum to 180°;</p> <p>tangent at any point on a circle is perpendicular to the radius at that point.</p> <p>tangents from an external point are equal in length;</p> <p>the perpendicular from the centre to a chord</p>			
--	--	--	--	--	--	--

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			<p>bisects the chord;</p> <p>alternate segment theorem</p>			
Holiday	Holiday					
25	Gradient and rate of change	<p>Maths genie website.</p> <p>Cobbett maths.</p> <p>Maths box.</p> <p>Century tech.</p> <p>Collins AQA</p> <p>GCSE maths</p> <p>Student book</p>	<p>Interpret the gradient at a point on a curve as the instantaneous rate of change</p> <p>Apply the concepts of average and instantaneous</p>		<p>Homework past paper for two weeks.</p> <p>Use of Century tech for homework and to monitor progress.</p> <p>Students self evaluation through RAG</p>	

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

			rates of change (gradients of chords and tangents) in numerical, algebraic and graphical contexts.		Mock exam at the end of the term.	
22	Gradient and rate of change	Maths genie website. Cobbett maths. Maths box. Century tech. Collins AQA GCSE maths Student book	<u>Interpret the gradient of a straight-line graph as a rate of change</u>			
23	Pre-calculus and area under the curve	Maths genie website. Cobbett maths.	Calculate or estimate			

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

		<p>Maths box. Century tech. Collins AQA GCSE maths Student book</p>	<p>gradients of graphs and areas under graphs (including quadratic and other non-linear graphs)</p> <p>Interpret the results in cases such as distance-time graphs, velocity-time graphs and graphs in financial contexts</p>			
	Algebraic fractions	<p>Maths genie website. Cobbett maths.</p>	Simplify and manipulate			

GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

		Maths box. Century tech. Collins AQA GCSE maths Student book	algebraic expressions involving algebraic fractions.			
	Revision					
	Revision					
	Revision					
	Revision June examination					
	Revision and June examination					



GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**

--	--	--	--	--	--	--



GCSE Resit Curriculum Assessment - **course may vary depending on individual needs of the class**