Subject: Mathematics

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Structure of the exam:

2 exam papers (one non-calculator, one calculator)

90 minutes each paper (Total of 180 minutes)

80 marks per paper – total of 180 Marks

Topics to be covered in the exam:

Sparx Code	Topic	Done?	Strand
U103	Simplifying algebraic fractions by cancelling common factors		Algebra
U110	Finding the surface area and volume of similar shapes		Geometry
U128	Using lines of best fit		Statistics
U151	Calculating with speed		Ratio, Proportion and Rates of Change
U174	Finding the volume of prisms		Geometry
U182	Drawing cumulative frequency graphs		Statistics
U191	Changing the subject when the subject appears more than once		Algebra
U201	Substituting into expressions		Algebra
U225	Estimating calculations		Number

Sparx Code	Topic	Done?	Strand
U228	Factorising to solve quadratic equations of the form $x^2 + bx + c = 0$		Algebra
U264	Multiplying and dividing numbers in standard form		Number
U277	Interpreting scatter graphs		Statistics
U283	Finding unknown sides in right-angled triangles		Geometry
U286	Finding original values in percentage calculations		Number
U294	Simplifying algebraic fractions by factorising into two brackets		Algebra
U301	Finding error intervals for truncated numbers		Number
U315	Finding equations of straight line graphs		Algebra
U332	Compound interest calculations		Number
U357	Solving inverse proportion word problems		Ratio, Proportion and Rates of Change
U369	Using the product rule for counting		Probability
U373	Finding the area of sectors		Geometry
U377	Equations of parallel lines		Algebra
U397	Completing the square		Algebra

Sparx Code	Topic	Done?	Strand
U407	Constructing direct proportion equations		Ratio, Proportion and Rates of Change
U468	Converting units of volume		Ratio, Proportion and Rates of Change
U507	Comparing populations using box plots and cumulative frequency graphs		Statistics
U534	Using standard form with negative indices		Number
U545	Finding unknown angles in right-angled triangles		Geometry
U578	Finding unknown sides in similar shapes		Geometry
U593	Graphs of reciprocal functions		Algebra
U595	Solving cross-topic problems with ratios (Higher)		Ratio, Proportion and Rates of Change
U601	Solving quadratic equations graphically		Algebra
U606	Expanding triple brackets		Algebra
U642	Interpreting cumulative frequency graphs		Statistics
U657	Finding error intervals		Number
U665	Solving quadratic equations using the quadratic formula		Algebra
U675	Changing the subjects of formulae with one step		Algebra

Sparx Code	Topic	Done?	Strand
U683	Probabilities of mutually exclusive events		Probability
U707	Rationalising denominators containing a single term		Number
U729	Tree diagrams for dependent events		Probability
U731	Rounding integers using significant figures		Number
U739	Prime factor decomposition		Number
U741	Plotting straight line graphs		Algebra
U760	Solving simultaneous equations using elimination		Algebra
U769	Finding the turning point of a quadratic graph by completing the square		Algebra
U771	Mixed problems: Finding the surface area of cones and spheres		Geometry
U772	Indices of the form a/b		Number
U773	Percentage change without a calculator		Number
U840	Drawing and interpreting frequency polygons		Statistics
U870	Solving equations with the unknown on both sides		Algebra
U872	Adding and subtracting surds		Number
U877	Finding averages from grouped data		Statistics

Sparx Code	Topic	Done?	Strand
U879	Drawing box plots		Statistics
U904	Problem solving: Area of triangles, parallelograms and trapeziums (Higher)		Geometry
U921	Combining ratios		Ratio, Proportion and Rates of Change
U926	Using a calculator		Number
U963	Factorising the difference of two squares		Algebra
U976	Using the correct order of operations		Number
U980	Graphs of cubic functions		Algebra
U985	Indices of the form 1/a		Number
U989	Plotting graphs of quadratic functions		Algebra

Types of question in the exam paper:

A mixture of:

- Short fluency questions (method + answer)
- Multi-step problem solving questions
- Reasoning questions (explain / justify your answer)

Essential subject revision:

Type of revision	Resources needed	Time required
Mind Maps / Summary Sheets Mind maps or 1-page	Exercise book/class notes, /KnowledgeOrganiser , paper.	30 minutes

summaries of key methods and facts.		
Exam Style Question practice Completing mixed exam-style questions under timed conditions.	ROA practice questions, Teams resources	30 minutes

Additional subject revision:

Type of revision	Resources needed	Time required
Recapping Homework content Recapping and correcting SPARX homework.	SPARX (Independent Learning tasks from codes supplied in revision list). www.mathsgenie.co.uk – past paper and GCSE Questions	30 minutes
Reteaching Lesson Content	Lesson booklets, lesson slides, worked examples, notes.	30 minutes per lesson
Self-quizzing Using look, cover, write, check for key methods, facts and vocabulary.	KnowledgeOrganiser / revision grid / method cards (if used).	30 minutes