Subject: Mathematics

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Structure of the exam:

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

45 minutes each paper (Total of 90 minutes)

45 marks per paper – total of 90 Marks

Topics to be covered in the exam:

SPARX code	Topic	Levels	Done?
KS3 SPARX topics (56 topics)			
M100	Factorising into one bracket	KS3 L1–4	☐
M106	Adding and subtracting with negative numbers	KS3 L1–4	☐
M108	Prime factor decomposition	KS3 L1–4	☐
M111	Rounding integers	KS3 L1–4	☐
M113	Multiplying and dividing by 10, 100 and 1000	KS3 L1–4	☐
M120	Simplifying expressions using index laws	KS3 L2–4	☐
M139	Translation	KS3 L1–4	☐
M157	Multiplying fractions	KS3 L1–4	☐

SPARX code	Topic	Levels	Done?
M169	Finding the circumference of circles	KS3 L1–4	☐
M175	Function machines with numbers	KS3 L1–2	☐
M206	Expected results from repeated experiments	KS3 L1–4	☐
M237	Expanding single brackets	KS3 L1–4	☐
M264	Converting between fractions, decimals and percentages	KS3 L1–4	☐
M290	Reflection	KS3 L1–4	☐
M354	Using a written method to divide integers	KS3 L1–4	☐
M365	Finding the HCF and LCM using prime factor decomposition	KS3 L1–4	☐
M381	Term-to-term rules for numerical sequences	KS3 L1–4	☐
M384	Reading and drawing inequalities on number lines	KS3 L3–4	☐
M401	Solving equations of the form (x+a)/(b)=c	KS3 L1–4	☐
M443	Estimating and measuring length	KS3 L1–2	☐
M448	Graphs of direct and inverse proportion	KS3 L3–4	☐
M465	Converting units of volume	KS3 L3–4	☐
M478	Solving proportion problems	KS3 L1–4	☐
M518	Nets of 3D shapes	KS3 L1–4	☐

SPARX code	Topic	Levels	Done?
M521	Using the correct order of operations	KS3 L1–4	☐
M527	Ordering negative numbers	KS3 L1–4	☐
M530	Converting units of mass	KS3 L1–2	☐
M531	Simplifying expressions containing multiple variables	KS3 L1–4	☐
M553	Ordering fractions, decimals and percentages	KS3 L1–4	☐
M568	Simplifying algebraic fractions by cancelling common factors	KS3 L3–4	☐
M606	Angles on parallel lines	KS3 L1–4	☐
M653	Angles in polygons	KS3 L1–4	☐
M677	Using Pythagoras' theorem in 2D	KS3 L2–4	☐
M678	Using standard form with negative indices	KS3 L3–4	☐
M681	Value for money	KS3 L2–4	☐
M684	Finding fractions of amounts with a calculator	KS3 L1–4	☐
M707	Solving equations with one step	KS3 L1–4	☐
M719	Using standard form with positive indices	KS3 L3–4	☐
M730	Finding error intervals	KS3 L4	☐
M732	Solving inequalities with the unknown on both sides	KS3 L4	☐

SPARX code	Topic	Levels	Done?
M755	Probabilities of mutually exclusive events	KS3 L2–4	☐
M765	Finding the volume of cubes and cuboids	KS3 L1–4	☐
M767	Properties of 3D shapes	KS3 L1–4	☐
M795	Simplifying expressions containing a single variable	KS3 L1–4	☐
M813	Algebraic notation	KS3 L1–4	☐
M817	Systematic listing	KS3 L2	☐
M823	Finding factors and using divisibility tests	KS3 L1–3	☐
M830	Algebraic terminology	KS3 L1–4	☐
M899	Interpreting frequency tables and two-way tables	KS3 L1–4	☐
M902	Solving linear equations involving brackets	KS3 L1–4	☐
M911	Multiplying using place value	KS3 L1–4	☐
M931	Adding and subtracting mixed numbers	KS3 L1–4	☐
M941	Writing probabilities as fractions	KS3 L1–4	☐
M957	Constructing and solving equations	KS3 L2–4	☐
M960	Expanding double brackets	KS3 L1–4	☐
M991	Position-to-term rules for arithmetic sequences	KS3 L2–4	☐

SPARX code	Topic	Levels	Done?
GCSE SPARX topics — beyond KS3 (7 topics)			
U264	Multiplying and dividing numbers in standard form	GCSE L1–5	☐
U301	Finding error intervals for truncated numbers	GCSE L1–5	☐
U564	Multiplying column vectors by a scalar	GCSE L1–5	☐
U632	Understanding column vectors	GCSE L1–5	☐
U714	Systematic listing	GCSE L3	☐
U903	Adding and subtracting column vectors	GCSE L1–2	☐
U963	Factorising the difference of two squares	GCSE L3–5	☐

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 summaries of key methods and facts.	Exercise book/class notes, /Knowledge Organiser paper.	30 minutes
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).	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.	Knowledge Organiser / revision grid / method cards (if used).	30 minutes