

Year 8	
Working with Numbers	Factors, Multiple, Primes, Order of Operations, Ratio & Proportion, Negative Numbers, Fractions, Decimals, Percentages, Long Multiplication & Division, Inverse Proportion
Using Algebra	Simplifying/Removing brackets, Solving equations, Factorising
Multiplying Brackets	Expanding double brackets, Making and solving equations using double brackets
Congruent Shapes and Construction	Congruent triangles
Geometrical Reasoning	Properties of Quadrilaterals/Angle Revision, Angles in polygons
Data Handling	Recap of Averages & Range, Grouped data
	Unit 1 Test
Data Handling	Frequency polygons, Cumulative Frequency
Using Fractions	Fraction Arithmetic, Solving problems with fractions, Recurring Decimals, Algebraic Fractions
Working with Indices	Laws of Indices, Solving equations with indices
Standard Form	Writing numbers in Standard Form, Solving problems using numbers in Standard Form, Using a Calculator
Scatter Graphs	Draw and Interpret Scatter Graphs, Draw and use a Line of Best Fit
Trial & Improvement	Method of Trial & Improvement, Solving equations and problems
	Unit 2 Test
Shape & Space – mixed problems	Angles, Bearings, Pythagoras' Theorem, Pythagoras' Theorem in Circles, Transformations (Reflection, Rotation, Enlargement)
Sequences – Finding a Rule	Arithmetic Progression (nth term), Quadratic Sequences, Arithmetic progression (nth term), Geometric progression
Rounding, Estimating, Errors and Bounds	Significant Figures, Using significant figures for estimating, Bounds of Accuracy
Drawing & Visualising 3D shapes	Drawing 3D shapes using isometric paper, Plan and Elevation of 3D Shapes, Planes of Symmetry and Elevation of 3D shapes
Percentages	Percentage Increase & Decrease, Reverse percentages, Mixed percentage questions, Simple interest
	Unit 3 Test
Transformations	Using Vectors to describe translations, Describe single transformations, Successive transformations
Reading, Interpreting Graphs & Charts	Using pie charts, bar charts and scatter graphs, Interpret and sketch line/real life graphs, Travel Graphs, Exponential & Reciprocal Graphs
Venn diagrams	Sets/subsets and Venn diagrams, Using Venn diagrams to find HCF & LCM, Using Venn diagrams for probability.
Area & Volume	Recap of simple area and volume, Find the radius of a circle, Volume of pyramids, spheres and cones.
Collecting & Interpreting Data	Collecting data and questionnaires, Bias in Data Collection
Simultaneous Equations	Solving simultaneous equations graphically and algebraically, Solving problems using simultaneous equations
	Unit 4 Test

Summer Exam	
Surds	Definition. Rules of surds. Rational and Irrational numbers. Simplifying. Multiplying out brackets.
Similar Shapes	Similar shapes, Triangles, Triangles with parallel lines
Compound Measures	Distance, speed & time, Density and Rates of Exchanges
Simple Interest	Simple interest.
	End of Year

Assessment Procedure

- Autumn grade will be based on the results of Year 7 exam and Test 1
- Spring grade will be based on the results of the Year 7 exam and Tests 1, 2 and 3
- Summer grade will be based on the unit tests and the summer exam (Paper 1 = non-calc Paper 2 = calc)