

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.
Scatter Graphs	Draw and Interpret Scatter Graphs. Draw and use a Line of Best Fit.
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'
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.
Sequences – Finding a Rule	Arithmetic Progression (nth term of a sequence). Quadratic Sequences. Arithmetic progression (nth term of an A.P). 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 (and cubes). Plans and Elevations of 3D Shapes. Planes of Symmetry of 3D shapes.
Percentages	Percentage Increase & Decrease. Reverse percentages. Mixed percentage questions. Simple interest.
	Unit 3 Test
Transformations	Transformations (Reflection, Rotation, Enlargement). Using Vectors to describe translations. Describe single transformations. Successive transformations.
Reading and 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.
Simultaneous Equations	Solving simultaneous equations graphically. Solving simultaneous equations algebraically. Solving problems using simultaneous equations.
Collecting & Interpreting Data	Collecting data and questionnaires. Bias in Data Collection.
	Unit 4 Test
	Revision
	Summer Exam
Surds	Definition. Rules of surds. Rational and Irrational numbers. Simplifying. Multiplying out brackets.
Similar Shapes	Similar shapes. Similar triangles. Triangles with parallel lines.
Compound Measures	Distance, speed & time. Density, mass & volume and Rates of Exchanges.
	Summer Holiday

Assessment Procedure

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