

Year 7	
Properties of Numbers	Primes, factors, multiples, prime factor decomposition. Square numbers, cubes, higher powers, square/cube roots.
Fractions	Equivalent fractions. Adding and subtracting. Multiplying and dividing.
Area and Perimeter	Rectangles and triangles. Parallelograms, trapeziums and kites. Mixed problems.
Negative Numbers	Add, subtract, multiply, divide.
Sequences	Finding the next term in a sequence and finding a rule. Differences in sequences.
Using a Calculator	Order of operations
	Unit 1 Test
Using a Calculator	Using calculators with brackets, negative numbers, powers.
Written Calculations	Scale reading. Place value. Adding and subtracting decimals. Multiplying and dividing decimals.
Estimating & Checking Answers	Estimating. Checking using inverses. Rounding.
Geometrical Reasoning	Angle properties, angles in triangles, quadrilaterals, and parallel lines. Proof.
Using Algebra	Rules of algebra. Simplifying expressions, multiplying brackets.
Circles	Circumference and area of a circle, perimeters of other shapes
	Unit 2 Test
Reflection	Reflections on squared paper. Reflections using coordinates.
Describing Data	Mean, median, mode and range. Comparing sets of data. Finding averages from frequency tables. Stem and leaf diagrams.
Formulas and Expressions	Substitution into formulae. Difference between formulae and expressions and substitution into expressions.
Construction and Locus	Triangle construction. Locus. Standard constructions.
	Unit 3 Test
Bearings and Scale Drawing	Bearings. Scale drawing.
Handling Data	Scatter graphs and correlation. Bar charts and pie charts.
Fractions, Decimals, Percentages	Conversion of fractions, decimals, percentages. Using percentages. Percentage increase and decrease.
Interpreting and sketching real life graphs	Interpret and sketch real life graphs
Solving Equations	Solving equations. Solving equations with fractions. Solving equations involving brackets. Equations with unknown on both sides. Using equations to solve problems.
Rotation and Combined Transformations	Rotating Shapes. Finding the centre of rotation. Translation. Combinations of two transformations.

	Unit 4 Test
Enlargement	Draw enlargement of shapes. Use the centre of enlargement.
Sequences	Finding the nth term.
Pythagoras' Theorem	Finding lengths of sides of triangles, solving problems.
Drawing and using graphs	Draw straight line graphs. Find the equation of a straight line. Use graphs in a real life context.
	Revision
	Summer Exam
Drawing and using graphs	Draw curved graphs.
Using ratios	Proportion. Simplify ratios and sharing. Map scales.
Congruent Shapes	Congruent shapes
Volume	Volume of a cuboid and other prisms, capacity and volume of cylinders.
Probability	Events not occurring, expected number of times. Two events – listing possible outcomes. Experimental probability.
Three Dimensional Objects	Isometric drawing, plan, side, front views.
Simultaneous Equations	Solving simultaneous equations algebraically.
	Summer Holiday

Assessment Procedure

- Autumn grade will be an effort grade only.
- Spring grade will be based on Unit Tests 1, 2 and 3
- Summer grade will be based on the Summer exam (Non Calc Paper).