

<u>Year 7</u>	
Properties of Numbers	Prime Numbers, Factors, Multiples, Prime Factor Decomposition
	Square Numbers, Cubes, Higher Powers, Square/cube roots
Fractions	Equivalent, Adding and Subtracting
	Multiplying and Dividing
Area and Perimeter	Rectangles and Triangles.
	Parallelograms and Trapeziums
	Mixed Problems
Negative Numbers	Add, Subtract, Multiply, Divide
Sequences	Finding the next term in a sequence/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 and Place Value
	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
Applying Mathematics in a Range of Contexts 1	Mixed questions.
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
Mental Calculations	At teacher's discretion – dedicated lesson(s) or incorporated into other topics
Formulas and Expressions	Substitution into Formulas
	Difference between formulas 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 & Correlation
	Bar Charts and Pie Charts
Fractions, Decimals, Percentages	Conversion of fractions, decimals, percentages
	Recurring Decimals
	Using percentages/percentage increase and decrease
Interpreting and sketching real life graphs	Interpret and sketch real life graphs
Rotation and Combined Transformations	Rotating Shapes, Finding the centre of rotation
	Combinations of two transformations
Brackets and Equations	Multiplying out brackets and simplifying
	Solving equations, Equations involving brackets
	Using equations to solve problems
	Equations with unknown on both sides
	Unit 4 Test
Enlargement	Draw enlargement of shapes. Use the centre of enlargement
Sequences	Finding the nth term
Applying mathematics in a range of contexts 2	Mixed questions.
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
	Summer Exam
Drawing and using graphs	Draw curved graphs
Using ratios	Simplify ratios, Ratio and sharing.
	Map Scales
Tessellation	Congruent Shapes, Tessellation
Volume	Volume of a cuboid and other prisms. Capacity. Volume of cylinders.
Percentages	Percentage of quantities, Increase and decrease quantities by a percentage.
Probability	Events not occurring, Expected number of times.
	2 events
	Experimental probability
More Algebra	Solve equations with fractions, Solve equations with brackets
	Problem solving with equations
Three Dimensional Objects	Isometric Drawing, Plan, side, front views.
	End of Year

Assessment Procedure

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