Year 11	
Circle properties	Angle in semi-circle. Angle at the centre. Angles at the circumference. Cyclic quadrilaterals. Tangent to a circle. Alternate segment theorem. Proof of circle properties.
Test 1	
Solving equations graphically	Solving equations graphically (interpreting roots).
Measuring - upper and lower bounds	Truncation**.** Finding upper and lower bounds. Write as an inequality. Calculations with upper/lower bounds. Rounding to an appropriate degree of accuracy.
Percentages	Finding percentage decrease/increase/change.
Test 2	
Volume and surface area	Prisms and units of area/volume. Volumes of spheres, pyramids and cones. Surface areas of cylinders, spheres and cones.
Similar shapes	Finding lengths, areas and volumes of similar shapes by considering the associated scale factors
Test 3	
Vectors	Basic concepts. Magnitude. Equal vectors. Multiplying by a scalar. Adding/subtracting vectors. Vector geometry.
Trigonometry 3	sin, cos, tan for 30, 45, 60. Mixed problems involving trigonometry**.** Trigonometry for angles of any size. Solving equations involving sin, cos or tan.
Transformation of functions	Translations and reflections of functions which includes sketching y=f(x)+k, y=f(x-k), y=-f(x), and y=f(-x) from the graph of y=f(x) for linear, quadratic, cubic, reciprocal, or trigonometric functions.
Proof	Algebraic proof.
Tangents to Circles	Finding the equation of a tangent to a circle.
Capture-recapture	Capture-recapture.
January mock	**Content of exams to be advised each year**
Revision	Revision of concepts taught in Years 7-11

Assessment Procedure

- Autumn grade will be based on the Year 10 exam and Tests 1, 2 and 3
- Spring grades will be based on the mock examination (Paper 1 = non-calc Paper 2/3 = calc)