| Higher | Unit | Sub-unit |
| :---: | :---: | :---: |
| Unit 1 | Powers, decimals, HCF and LCM, positive and negative, roots, rounding, reciprocals, standard form, indices and surds | 1a. Calculations, checking and rounding |
|  |  | 1b. Indices, roots, reciprocals and hierarchy of operations |
|  |  | 1c. Factors, multiples, primes, standard form and surds |
| Unit 2 | Expressions, substituting into simple formulae, expanding and factorising, equations, sequences and inequalities, simple proof | 2a. Algebra: the basics, setting up, rearranging and solving equations |
|  |  | 2b. Sequences |
| Unit 3 | Averages and range, collecting data, representing data | 3a. Averages and range |
|  |  | 3b. Representing and interpreting data and scatter graphs |
| Unit 4 | Fractions, percentages, ratio and proportion | 4a. Fractions and percentages |
|  |  | 4b. Ratio and proportion |
| Unit 5 | Angles, polygons, parallel lines; Right-angled triangles: Pythagoras and trigonometry | 5a. Polygons, angles and parallel lines |
|  |  | 5b. Pythagoras' Theorem and trigonometry |
| Unit 6 | Real-life and algebraic linear graphs, quadratic and cubic graphs, the equation of a circle, plus rates of change and area under graphs made from straight lines | 6a. Graphs: the basics and real-life graphs |
|  |  | 6b. Linear graphs and coordinate geometry |
|  |  | 6c. Quadratic, cubic and other graphs |
| Unit 7 | Perimeter, area and volume, plane shapes and prisms, circles, cylinders, spheres, cones; Accuracy and bounds | 7a. Perimeter, area and circles |
|  |  | 7b. 3D forms and volume, cylinders, cones and spheres |
|  |  | 7c. Accuracy and bounds |
| Unit 8 | Transformations; Constructions: triangles, nets, plan and elevation, loci, scale drawings and bearings | 8a. Transformations |
|  |  | 8b. Constructions, loci and bearings |
| Unit 9 | Algebra: Solving quadratic equations and inequalities, solving simultaneous equations algebraically | 9a. Solving quadratic and simultaneous equations |
|  |  | 9b. Inequalities |
| Unit 10 | Probability |  |
| Unit 11 | Multiplicative reasoning: direct and inverse proportion, relating to graph form for direct, compound measures, repeated proportional change |  |
| Unit 12 | Similarity and congruence in 2D and 3D |  |
| Unit 13 | Sine and cosine rules, $1 / 2 \mathrm{ab} \sin \mathrm{C}$, trigonometry and Pythagoras' Theorem in 3D, trigonometric graphs, and accuracy and bounds | 13a. Graphs of trigonometric functions |
|  |  | 13b. Further trigonometry |
| Unit 14 | Statistics and sampling, cumulative frequency and histograms | 14a. Collecting data |
|  |  | 14b.Cumulative frequency, box plots and histograms |
| Unit 15 | Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics |  |
| Unit 16 | Circle theorems and circle geometry | 16a. Circle theorems |
|  |  | 16b. Circle geometry |
| Unit 17 | Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof |  |
| Unit 18 | Vectors and geometric proof |  |
| Unit 19 | Direct and indirect proportion: using statements of proportionality, reciprocal and exponential graphs, rates of change in graphs, functions, transformations of graphs | 19a. Reciprocal and exponential graphs; Gradient and area under graphs |
|  |  | 19b. Direct and inverse proportion |

