| Subject: <br> Year 10H | Autumn HT 1 | Autumn HT 2 | Spring HT 1 | Spring HT 2 | Summer HT 1 | Summer HT 2 |
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|  | Unit 1: Powers, decimals, HCF and LCM, positive and negative, roots, rounding, reciprocals, standard form, indices and surds <br> Calculations, checking and rounding <br> Indices, roots, reciprocals and hierarchy of operations <br> Factors, multiples, primes, standard form and surds <br> Unit 2: Expressions, substituting into simple formulae, expanding and factorising, equations, sequences and inequalities, simple proof <br> Algebra: the basics, setting up, rearranging and solving equations <br> - Sequences <br> Unit 3: Averages and range, collecting data, representing data <br> Averages and range Representing and interpreting data and scatter graphs | Unit 4: Fractions, percentages, ratio and proportion <br> - Fractions and percentages <br> - Ratio and proportion <br> Unit 5: Angles, polygons, parallel lines; Right-angled triangles: <br> - Pythagoras and trigonometry <br> - Polygons, angles and parallel lines <br> - 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 <br> - Graphs: the basics and real-life graphs <br> - Linear graphs and coordinate geometry <br> - Quadratic, cubic and other graphs | Unit 7: Perimeter, area and volume, plane shapes and prisms, circles, cylinders, spheres, cones; Accuracy and bounds <br> - Perimeter, area and circles <br> - 3D forms and volume, cylinders, cones and spheres <br> - Accuracy and bounds <br> Unit 8: Transformations; Constructions: triangles, nets, plan and elevation, loci, scale drawings and bearings <br> - Transformations <br> - Constructions, loci and bearings | Unit 9: Algebra: Solving quadratic equations and inequalities, solving simultaneous equations algebraically <br> - Solving quadratic and simultaneous equations <br> - Inequalities <br> Unit 10: Probability <br> - Probability <br> Unit 11: Multiplicative reasoning: direct and inverse proportion, relating to graph form for direct, compound measures, repeated proportional change <br> - Multiplicative reasoning | Unit 12: Similarity and congruence in 2D and 3D <br> - Similarity and congruence in 2D and 3D |

