Kirk Hallam Community Academy: Mathematics Learning Overview

WORK HARD BE KIND

	HT1	HT2	HT3	HT4	HT5	HT6
Year 7	**7.1N (Number)** • Number system, Rounding, calculations **7.1A (Algebra)** • Introduction to algebra **7.1P (Statistics)** • Drawing key diagrams, averages from a list	**7.2N (Number)** • Factors and multiples **7.2A (Algebra)** • Solving linear equations/inequalities **7.3U (Units and measures)** • Scales, estimations, metric measures	**7.3N (Fractions, decimals, percentages)** • Conversions **7.3Sa (2d/3d Shapes)** • Symmetry, angles **7.3Sb (Shape)** • Length, area, volume, similarity	**7.3Sb (Shape)** • Length, area, volume, similarity **7.4A (Algebra)** • Coordinates	**7.5A (Sequences)** • Linear sequences **7.5N (Ratio and proportion)** • Ratio notation, simplifying, fraction – ratio links	**7.6P (Probability)** • Probability scale, relative frequency **7.6Sa (Transformations)** • Rotation, reflection, translations, congruence **7.6Sb (Angles)** • Types, in shapes
Year 8	**8.1N (Number)** • Fractions, rounding significant figures, BIDMAS **8.1A (Algebra)** • Factorising, expanding **8.1P (Statistics)** • Scatter graphs, pie charts	**8.2N (Number)** • Indices **8.2 (Algebra)** • Circle formulae, changing the subject **8.2U (Units and measures)** • Choosing correct units, compound measures	**8.3N (Fractions, decimals and percentages)** • Calculations, proportions **8.3Sa (2d/3d Shapes)** • Classifications, scale drawing **8.3Sb (Shape)** • Congruence, circles area and circumference	**8.4S (Shape)** • Congruence, circles area and circumference **8.4A (Algebra)** • $y = mx + c$	**8.5A (Sequences)** • n^{th} term **8.5N (Ratio and proportion)** • Ratio in context, unitary method, best buy	**8.6P (Probability)** • Listing, two ways tables, frequency trees, sample space **8.6Sa (Transformations)** • Doing and describing transformations **8.6Sb (Angles)** • Properties of shapes
Year 9	**9.1N (Number)** • Estimation **9.1A (Algebra)** • Numeric and algebraic function machines **9.1P (Statistics)** • Averages from tables	**9.2N (Number)** • Index laws **9.2A (Algebra)** • Simultaneous equations **9.2U (Units and measures)** • Speed/distance/time, metric and imperial	**9.3N (Fractions, decimals and percentages)** • Real life, reverse percentages **9.3Sa (2d/3d Shapes)** • Maps and scales **9.3Sb (Length, area, volume, similarity)** • Sectors	**9.4A (Algebra)** • Gradients, plotting functions, finding equation of a straight line **9.4T (Pythagoras and Trigonometry)**	**9.5A (Sequences)** • Common difference to find n^{th} term **9.5N (Ratio and proportion)** • Maps, scales, estimation from drawings,	**9.6P (Probability)** • Experimental probabilities, frequency trees, tree diagrams **9.6Sa (Transformations)** • Enlargements, scale factors **9.6Sb (Angles)** • Parallel lines, polygons
Year 10	**10.1N (Number)** • Error intervals, limits of accuracy / bounds **10.1A (Algebra)** • Identities, factorising quadratics, 3 brackets **10.1P (Statistics)** • Sampling, Cumulative frequency, histograms	**10.2N (Number)** • Fractional indices, listing strategies, standard form, exact values **10.2A (Algebra)** • Solving Quadratics **10.2U (Units and measures)** • Speed/distance/time, compound units	**10.3N (Fractions, decimals and percentages)** • Multipliers, repeated change, exponential growth **10.3Sa (2d/3d Shapes)** • Bearings, Constructions **10.3Sb (Length, area, volume, similarity)** • Cones and pyramids, congruence and proof	**10.4A (Algebra)** • Parallel lines, quadratic graphs, completing the square, equation of a circle **10.4T (Pythagoras and Trigonometry)** • Bearings, 3D, sine and cosine rules, graphs	**10.5A (Sequences)** • Special sequences, quadratic n^{th} terms, geometric progressions, **10.5N (Ratio and proportion)** • Geometry, direct and indirect proportion	**10.6P (Probability)** • Set theory, tree diagrams, conditional probability **10.6Sa (Transformations)** • Fractional enlargements, vectors, combinations **10.6Sb (Angles)** • Circle theorems
Year 11	**11.1N (Number)** • Revision of number **11.1A (Algebra)** • Revision of algebra **11.1P (Statistics)** • Revision of charts	**11.2U (Units and compound measures)** • Application of exam questions **11.2S (2d/3d shapes)** • Bearings, constructions - loci • Length, area, volume, similarity **11.2T (Pythagoras/ Trigonometry)**	**11.3N (Fractions, decimals and percentages)** • Revision of FDP **11.3AA (Algebra)** • Transformations, complex graphs, proportion **11.3AB (Sequences)** • Revision of sequence topics	**11.4N (Ratio and proportion)** **11.4S (Probability)** **11.4T (Trigonometry)** • Revision of topics	**Recall, Review and Revise / Examinations** <u>Key</u> N - Number A - Algebra P - Probability and Statistics U - Units and Measures S - Statistics T - Trigonometry and Pythagoras	