Millbay Academy

Year	Year 11 - Mathematics					
Foci	Preparing Students for their GCSEs and applying their maths skills in the wider world.					
Time	HT1	HT2	HT3	HT4	HT5	HT6
Subject	Number	Algebra	Geometry/ Ratio	Statistics/ Probability	Revision and Exams	N/A
Key Idea	Recapping and building upon basic number skills. Identifying gaps that could cause issues later on.	Covering all aspects of Algebra due to a gap in coverage. This needs to be applied in HT3/4.	Recap of topics previously covered in Year 10. Apply number and algebra skills.	Recap of topics previously covered in Year 10. Apply number and algebra skills.	Use of QLA and self assessment for students to have tailored revision.	N/A
Spec. ref	N1-7, R9	A1-25, R14	N11, N13, R1-16, G1-25	N5,P1-9, S1-6	N/A	N/A
Topics	- Calculations, Primes, Multiples and Factors - Frac, Dec, Perc - Powers, Indices, Roots and Surds (including Standard Form) - Rounding, Accuracy and Estimation	- Expressions, Equations, Inequalities and Formulas - Quadratics - Graphs - Simultaneous Equations and Iteration - Sequences	- Ratio - Direct and Inverse Proportion 2D and 3D Shapes - Pythagoras and Trigonometry - Circles - Transformations, Constructions and Scale Drawings - Congruence and Similarity - Units and Measurement - Vectors	- Probability - Probability Trees - Venn Diagram - Data and Sampling - Averages - Representing Data	Recap of most common topics and those from the QLA's that students need to recap	N/A
Assessment	Bespoke created end of topic tests with dedicated DIRT time. Mock Exams and DIRT time.					

Millbay Academy

Year	Year 10 Higher Mathematics					
Foci	Basic overview of all topics in maths ready for deeper understanding and mastery in year 11.					
Time	HT1	HT2	HT3	HT4	HT5	HT6
Subject	Number, Ratio and Probability	Algebra	Geometry and Ratio	Geometry and Ratio	Geometry	Statistics
Key Idea	Recapping and building upon basic number skills. Identifying gaps that could cause issues later on.	Covering all aspects of Algebra due to a gap in coverage. This needs to be applied later.	Securing basic geometry and Ratio skills. These are to be applied next half term.	Continuing developing Geometry and Ratio skills.	Further developing Geometry Skills.	Applying number skills to a statistics situation.
Spec. ref	N2, N3, N4, N5, N6, N7, N8, N9, N14, N15 N1, N2, N3, N8, N10, N11, N12, N13, R2, R3, R4, R5, R6, R7, R8, R9, R10. N5, P1, P2, P3, P4, P5, P6, P7, P8	N1, N3, N8, N9, A1,A2, A3, A4, A5, A6, A7, A17, A20, A21, A23, A24, A25 N13, A8, A9, A10,A11, A12, A14, A15, A16, A17, A18, R1, R10, R11, R14 N1, N8, A4, A5, A9, A11, A18, A19, A21, A22	N8, N14, N15, A5, A21, R1, G1, G9, G12, G13, G14, G16, G17, G18 N3, N12, N13, R1, R6, R8, R10, R11, R13, R14, R16	R2, R6, G2, G3, G5, G7, G8, G12, G15, G24, G25 R6, R12, G5, G6, G17, G19	N7, N8, N15, A4, A5, R12, G1, G3, G4, G6, G11, G20, G21 N16, A5, A8, A12, A13, G11, G20, G21, G22, G23	G14, S2, S3, S4, S5, S6 S1, S3, S4, S5 N8, A4, A11, A12, A18, A19, A20, A21, A22, R16
Topics	● Number ● Fractions, Ratio and Percentages ● Probability	● Algebra ● Graphs ● Equations, and Inequalities	● Area and Volume ● Multiplicative Reasoning	● Transformations and Constructions ● Similarity and Congruence	● Angles and Trigonometry ● More Trigonometry	● Interpreting and representing data ● Further Statistics ● Equations and Graphs
Assessment	Bespoke created end of topic tests with dedicated DIRT time. Mock Exams and DIRT time.					

Year	Year 10 Foundation Mathematics					
Foci	Basic overview of all topics in maths ready for deeper understanding and mastery in year 11.					
Time	HT1	HT2	HT3	HT4	HT5	HT6
Subject	Number and Probability	Algebra	Ratio and Proportion	Geometry	Geometry	Statistics
Key Idea	Recapping and building upon basic number skills. Identifying gaps that could cause issues later on.	Covering all aspects of Algebra due to a gap in coverage. This needs to be applied later.	Securing basic Ratio skills. These are to be applied next year.	Continuing developing Geometry and Ratio skills.	Further developing Geometry Skills.	Applying number skills to a statistics situation.
Spec. ref	N1, N2, N3, N4, N5, N6, N7, N13, N14, N15 N1, N2, N3, N8, N10, N12, N13, R3, R9, S2 N5, P1, P2, P3, P4, P5, P6, P7, P8	N1, N3, A1, A2, A3, A4, A5, A6, A7, A21 N1, N15, N16, A2, A3, A5, A7, A17, A21, A22, A23, A24, A25	N11, N13, R1, R2, R3, R4, R5, R6, R7, R8, R10, R12, R13, R14 N12, N13, A5, R1, R9, R10, R11, R13, R16, G14	N14, A5, G11, G12, G14, G15, G16, G17 A8, G1, G3, G4, G7, G6, G11, G15 R6, R12, G1, G7, G24	N7, N15, A4, A5, R12, G6, G20, G21 R2, G1, G2, G5, G9, G12, G13, G15	G2, G14, G15, S2, S4, S5, S6 S1, S2, S4 N13, A7, A8, A9, A10, A12, A14, A17, R1, R11, R14, G11, G14
Topics	● Number ● Fractions and Percentages ● Probability	● Algebra ● Equations, Inequalities and Sequences	● Ratio and Proportion ● Multiplicative Reasoning	● Perimeter, Area and Volume ● Angles ● Transformations	● Right Angled Triangles ● Constructions, Loci and Bearings	● Graphs, Tables and Charts ● Averages ● Graphs
Assessment	Bespoke created end of topic tests with dedicated DIRT time. Mock Exams and DIRT time.					

Millbay Academy

Year	Year 9 Higher Mathematics					
Foci	Recapping basics in Number and Algebra and starting to apply these across statistics and Geometry.					
Time	**HT1**	**HT2**	**HT3**	**HT4**	**HT5**	**HT6**
Subject	Number	Algebra	Statistics and Number	Geometry	Statistics	Geometry
Key Idea	Recapping and building upon basic number skills. Identifying gaps that could cause issues later on.	Covering all aspects of Algebra due to a gap in coverage. This needs to be applied later.	Further developing number skills and applying to Statistics.	Applying Number and Algebra skills to Geometry. Recapping basic Geometry skills.	Further developing Statistics skills.	Further developing Geometry skills.
Spec. ref	N2, N3, N4, N5, N6, N7, N8, N9, N14, N15	N1, N3, N8, N9, A1,A2, A3, A4, A5, A6, A7, A17, A20, A21, A23, A24, A25	G14, S2, S3, S4, S5, S6, N1, N2, N3, N8, N10, N11, N12, N13, R2, R3, R4, R5, R6, R7, R8, R9, R10.	N7, N8, N15, A4, A5, R12, G1, G3, G4, G6, G11, G20, G21	N13, A8, A9, A10,A11, A12, A14, A15, A16, A17, A18, R1, R10, R11, R14 N1, N8, A4, A5, A9, A11, A18, A19, A21, A22	N8, N14, N15, A5, A21, R1, G1, G9, G12, G13, G14, G16, G17, G18
Topics	● Number	● Algebra	● Interpreting and Representing Data ● Fractions, Ratio and Percentages	● Angles and Trigonometry	● Graphs ● Equations and Inequalities	● Area and Volume
Assessment	Bespoke created end of topic tests with dedicated DIRT time.					

Millbay Academy

Year	Year 9 Foundation Mathematics					
Foci	Recapping basics in Number and Algebra and starting to apply these across statistics and Geometry.					
Time	HT1	HT2	HT3	HT4	HT5	HT6
Subject	Number	Algebra	Statistics and Number	Algebra	Geometry and Statistics	Geometry
Key Idea	Recapping and building upon basic number skills. Identifying gaps that could cause issues later on.	Covering all aspects of Algebra due to a gap in coverage. This needs to be applied later.	Further developing number skills and applying to Statistics.	Further developing Algebra skills and confidence.	Recapping basic Geometry skills and further developing statistics knowledge. Applying Number skills.	Further developing Geometry skills and confidence.
Spec. ref	N1, N2, N3, N4, N5, N6, N7, N13, N14, N15	N1, N3, A1, A2, A3, A4, A5, A6, A7, A21	G2, G14, G15, S2, S4, S5, S6 N1, N2, N3, N8, N10, N12, N13, R3, R9, S2	N1, N15, N16, A2, A3, A5, A7, A17, A21, A22, A23, A24, A25	A8, G1, G3, G4, G7, G6, G11, G15 S1, S2, S4	N14, A5, G11, G12, G14, G15, G16, G17
Topics	● Number	● Algebra	● Graphs, Tables and Charts ● Fractions and Percentages	● Equations, Inequalities and Sequences	● Angles ● Averages and Range	● Perimeter, Area and Volume 1
Assessment	Bespoke created end of topic tests with dedicated DIRT time.					

Year	Year 8 Mathematics					
Foci						
Time	**HT1**	**HT2**	**HT3**	**HT4**	**HT5**	**HT6**
Subject	Number, RPRoC and Geometry	Algebra and Statistics	Number and Probability	Algebra and Geometry	Number, RPRoC and Geometry	Algebra, RPRoC and Geometry
Key Idea	Basics of Number, Geometry and RPRoC to be used throughout secondary maths education.					
Spec. ref						
Topics	- Negative Numbers - Indices and Standard Form - Rounding - Operations - Measures 2D and 3D Shape	- Simplifying Expressions - Algebraic Fractions - Solving Equations - Sequences - Data and Averages - Interpreting Diagrams	- Factors, Multiples and Primes - Fractions and Mixed Numbers - Fractions, Decimals and Percentages - Parts of Amounts - Probability - Probability Diagrams	- Simplifying Expressions - Solving Equations - Inequalities and Simultaneous Equations - Formulae - Graphs and Coordinates - Angles and Construction	- Parts of Amount - Ratio - Proportion - Circles - Surface Area and Volume - Pythagoras' Theorem	- Time - Graphs - Distance-time Graphs - Transformations - Congruence and Bearings - Maps and Bearings
Assessment	Bespoke created end of topic tests with dedicated DIRT time.					

Year	Year 7 Mathematics					
Foci						
Time	HT1	HT2	HT3	HT4	HT5	HT6
Subject	Number, Geometry and Probability	Number, RPRoC and Algebra	Number, Geometry and Statistics	Number and Algebra	Number, Geometry, RPRoC and Probability	Geometry, Algebra and Statistics
Key Idea	Basics of Number, Geometry and Probability to be used throughout secondary maths education.					
Spec. ref						
Topics	- Fractions and mixed numbers - Addition and subtraction - Negative Numbers - Area and perimeter - Theoretical Probability - Experimental Probability	- Rounding and Operations - Order of Operations - Simplifying Expressions - Substituting - Solving Equations - Time and Measures	- Fractions - Fractions, Decimals and Percentages - Angles - Construction - Averages - Statistical Diagrams	- Factors, Multiples and Primes - Fractions and Mixed Numbers - Simplifying Expressions - Brackets - Substituting and Solving - Graphs and Coordinates	- Area and Perimeter - Surface Area and Volume - Fractions, Decimals and Percentages - Parts of Amounts - Ratio and Proportion - Probability	- Angles - Construction - Numeric Sequences - Sequences of Pattern - Collecting and Presenting Data - Transformations
Assessment	Bespoke created end of topic tests with dedicated DIRT time.					