

MCS Math Analysis & Approaches SL Year 1 Subject Group Overview

Unit Name	Unit 1 - Topic 2: Functions	Unit 2 - Topic 1: Numbers & Algebra	Unit 3 - Topic 4: Probability & Statistics	Unit 4 - Topic 3: Geometry & Trigonometry	Internal Assessment
Time Frame	8-9 Weeks	5-6 Weeks	6-7 Weeks	6 -7 Weeks	6 Weeks
Standards / IB Topics	Topic 2: SL 2.1 – 2.11	Topic 1: SL 1.1 – 1.9	Topic 4: SL 4.1 – 4.12	Topic 3: SL 3.1 – 3. 8	Students will work to complete their Math Exploration Paper
Content Specific	2.1 Linear Equations, Parallel, Perpendicular Lines 2.2 Domain, Range, Inverses 2.3 Graphs of Functions 2.4 Key features of Graphs 2.5 Composite functions 2.6 Quadratic Functions 2.7 Quadratic Equations & Inequalities, discriminant 2.8 Rational Functions & Equations 2.9 Exponential & Log Functions 2.10 Solving all equations 2.11 Transformations of Graphs	1.1 Operations with numbers in scientific notation form 1.2 Arithmetic Sequences 1.3 Geometric Sequences 1.4 Financial Applications of Geometric Sequences 1.5 Laws of Exponents 1.6 Algebraic Proofs 1.7 Properties of Logs 1.8 Sum of Geometric Sequences 1.9 Binomial Theorem	4.1 Population, samples, outliers 4.2 Presentation of data, box-whisker plots, histograms 4.3 Measures of central tendency & dispersion, 4.4, 4.10 Linear Regression 4.5 Probability of Events 4.6, 4.11 Conditional, independent, dependent probability 4.7 Expected Value 4.8 Binomial distribution 4.9, 4.12 Normal distribution	3.1 Distance, midpoint, volume 3.2 Sine, Cosine, Tangent Ratios, Sine Rule, Cosine Rule & Area of a Triangle 3.3 SOH CAH TOA applications 3.4 Unit Circle 3.5 Sine, Cosine, Tangent in terms of unit circle, radians 3.6 Trig Identities 3.7 Circular Functions 3.8 Solving Trig Equations	All IB standards
Common Assessments/ Major Projects	Common Formative Assessments Common Summative Assessment	Common Formative Assessments Common Summative Assessment	Common Formative Assessments Common Summative Assessment	Common Formative Assessments Common Summative Assessment	Internal Assessment
Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources