2017-18 Algebra Matrix

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
	4 Wks	4 Wks	4 Wks	4Wks	6 Wks	4 Wks
Chapter	3	4	5	1, 2 & 5	10	6
Sections	3.1-3.6	4.1-4.7	5.1-5.4	5.5, 2.6, 2.7, 1.7, 5.6	10.1-10.7	6.1-6.6
Exclusions	Inverse, Piecewise	4.5 Direct Variation	5.5, 5.6 Inequalities			
Unit Name	Functions	Linear Functions	Systems of Equations	Inequalities	Data Analysis & Statistics	Exponents & Polynomials
Key Concept	Relationships	Relationships	Systems	Relationships	Logic	Logic
Related Concept(s)	Model & Representation	Change & Representation	Representation System	Equivalence Representation	Model	Justification Patterns
Global Context	Scientific and Technical Innovation	Scientific and Technical Innovation	Scientific and Technical Innovation	Scientific and Technical Innovation	Identities and Relationships	Scientific and Technical Innovation
Statement of Inquiry	Functions can be used to model real-world relationships.	Relationships in our world can be represented mathematically.	Algebraic systems represent real world scientific systems.	Inequalities can help explain relationships in the world in which we live.	Human relationships can be modeled using logic	Logic results from justifying the pattern of mathematical puzzles.
MYP Subject Group Objectives	Criterion A Criterion B	Criterion A Criterion D	Criterion A Criterion C	Criterion A Criterion D	Criterion A Criterion C	Criterion A Criterion B
ATL Skills	Social: Collaboration skills - (Exercise Leadership and take on a variety of roles within a group) (Build consensus)	Thinking: Critical thinking skills (Interpret data) (Propose and evaluate a variety of solutions)	Organization: Managing time and tasks effectively (Create plans to prepare for summative assessments)	Thinking: Critical thinking skills (Gather and organiz relevant information to formulate an argument)	Communication Skills: (Organize and depict information logincally) (Structure information in summaries, essays and reports)	Thinking: Critical thinking skills (Consider ideas from multiple perspectives)

Geometry Matrix 2019-2020

	Quarter 1			Quarter 2			Quarter 3		Quarter 4	
	Unit 1	Unit 2		Unit 3		Unit 4		Unit 5	Unit 6	
	5 Wks	4 Wks	3 Wks	3 Wks	3 Wks	3 wks		5 Wks	5 Wks	5 wks
Chapter	1	2	3	4	6	7		8	10	11
Sections	1.2-1.8	2.1-2.6	3.1-3.7	4.1-4.6	6.1-6.8	7.1, 7.2, 7.5		8.1-8.6	10.1-10.7	11.2-11.6
Exclusions										
Unit Name	Tools of Geometry	Logic, Lines, and Angles		Congruent Triangles		Polygons, Quadrilaterals, and Similarity		Right Triangle Relationships and Trigonometry	Area and Volume	
Key Concept	Form	Logic		Relationships		Relationships		Form	Relationships	
Related Concept(s)	Change, Equivalence, Asthetics	Equivalence & Justification		Measurement, Equivalence, Justification		Equivalence, Justification, Space, Measurement		Change, Measurement, Model and Representation	Measurement, Space	
Global Context	Orientation in Time and Space	Identities and Relationships		Globalization and Sustainability		Identities and Relationships		Scientific and Technical Innovation	Orientation in Space and Time	
Statement of Inquiry	Transformations of equivalent forms through space can be used to replicate efficient design.	Logic is a tool society uses to justify claims based on discovery.		Relationships between equivalent figures justifies the interconnectedness of human-made systems.		There are many things that are the same yet different.		The universe can be explained in simple terms.	Measurement determines the relationships within shapes in space	
MYP Subject Group Objectives	Criterion A Criterion D	Criterion A Criterion B		Criterion A Criterion B		Criterion A Criterion D		Criterion C Criterion D	Criterion A Criterion D	
ATL Skills	Thinking - Interpret Data	Thinking - Test Generalizations and Conclusions		Thinking - Draw Reasonable Conclusions and Generalizations		I. Communication skills Exchanging thoughts, messages and information effectively through interaction Use a variety of speaking techniques to communicate with a variety of audiences Use appropriate forms of writing for different purposes and audiences Students will solo write, talk with partner, talk with group, and present to class on specific topics Students will use paragraph form and 2-column proofs to communicate findings		Communication - Use appropriate forms of writing for different purposes and audiences	Thinking - Propose and evaluate a variety of solutions, Identify trends and forecast possiblities, Practise visible thinking strategies and techniques	

	Quarter 1	Quarter 2	Quarter 3		Quarter 4
2018-2019 Algebra 2 Honors Matrix					
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
	8 Wks	8 Wks	7 Wks	5 Wks	7 Wks
Unit Name	Function Models	Quadratic Functions	Polynomial Functions	Exponential Functions	Linear Programming
Key Concept	Form	Relationships	Form	Relationships	Logic
Related Concept(s)	Change, Model	Model, Representation	Change, Representation	Model, Quantity	Model, System
Global Context	Scientific & Technical Innovation	Globalization & Sustainability	Globalization & Sustainability	Identities & Relationships	Scientific & Technical Innovation
Statement of Inquiry	Changing form enables the creation of different models that are essential in technical innovation.	Decision-making can be improved by using a model to represent relationships.	Discovering change in form through mathematical representation can lead to a better understanding of how environmental systems evolve.	Exponential models can be used to demonstrate relationships that involve very large or very small quantities.	Creating a model of a system leads to the logic required to find an optimum solution.
MYP Subject Group Objectives	Criterion A Criterion D	Criterion A Criterion C Criterion D	Criteria A Criteria B	Criterion A Criterion C	Criterion A Criterion C
ATL Skills	Thinking X. Transfer skills Utilizing skills and knowledge in multiple contexts Combine knowledge, understanding and skills to create products or solutions Thinking IX. Creative thinking skills Generating novel ideas and considering new perspectives Apply existing knowledge to generate new ideas, products or processes	Thinking VIII. Critical thinking skills Analysing and evaluating issues and ideas Test generalizations and conclusions Use models and simulations to explore complex systems and issues	Self-Management III. Organization skills Managing time and tasks effectively Use appropriate strategies for organizing complex information Thinking VIII. Critical thinking skills Analysing and evaluating issues and ideas Identify trends and forecast possibilities	Communication I. Communication skills Reading, writing and using language to gather and communicate information Write for different purposes Understand and use mathematical notation	Communication skills Reading, writing and using language to gather and communicate information Write for different purposes Organize and depict information logically

	2019-20 Trigonometry Matrix						
	Quarter 1		Quarter 2		Quarter 3		Quarter 4
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
	4 Wks	2 Wks	4 Wks	4 Wks	5 Wks	5 Wks	8 Wks
Unit Name	Advanced Number Sense	Equations and Graphs	Functions and their Graphs	Logarithmic Functions and Radicals	The Unit Circle	Trigonometric Functions	Graphing Trigonometric Functions
Key Concept	Relationships	Systems	Form	Logic	Logic	Logic	Logic
Related Concept(s)	Model & Representation	System & Simplification	Representation & Generalization	Equivalence & Simplification	Space & Pattern	Justification & Measurement	Patterns & Representation
Global Context	Scientific and Technical Innovation	Scientific and Technical Innovation	Scientific and Technical Innovation	Scientific and Technical Innovation	Orientation in Space and Time	Scientific and Technical Innovation	Scientific and Technical Innovation
Statement of Inquiry	Decison-making in scientific and technical innovation can be improved by using a model to represent relationships.	Systems can be simplified, contributing to Scientific and Technical Innovation.	Representation of functions can be generalized to form conclustons for scientific and technical innovation.	There are multiple ways to simplify equivalent forms of functions and radicals.	Patterns can be found when connecting trigonometric ratios to the Unit Circle.	Logic is a powerful tool for justifying what we discover though measurement and observation.	Patterns can be represented when graphing trigonometric functions.
MYP Subject Group Objectives	Criterion A Criterion C	Criterion A Criterion D	Criterion A Criterion B	Criterion A Criterion B	Criterion A Criterion C	Criterion A Criterion D	Criterion A Criterion D
ATL Skills	Communication Skills: Give and receive meaningful feedback. Take effective notes in class.	Research: Collect, record and verify data.	Thinking: Propose and evaluate a variety of solutions.	Thinking: Make unexpected or unusual connections between objects and/or ideas.	Thinking: Practise observing carefully in order to recognise problems.	Thinking: Draw resonable conclusions and generalizations	Thinking: Consider ideas from multiple perspective.