

**IBMYP Subject Overview  
2019-2020**

**Subject Area:** Math **Course:** Algebra I **MYP Level:** 2 & 3 **Teacher(s):** Wilcox

Time Frame (Dates)	Unit Title and Topic (* = interdisciplinary connection; @ = Action)	MYP Objectives	State Standards	Key Concept	Related Concepts	Global Context	Statement of Inquiry	MYP Assessment Task & ATL Focus	MYP Criteria	Learner Profile Focus
Sept-Oct	Order In the Court  (Integers, Fractions, Expressions, Pre-Algebra Prerequisites)  * Arts	A. Knowing and Understanding (Mid-Year Exam) C Communicating	A.1. A.2.	Relationships the connections and associations between properties	Pattern, Representation	Science and Technical Innovation - how humans use their understanding of scientific principles  Exploration: Products, processes and solutions.	Patterns represent relationships between products, processes and solutions	Order of Ops Fashion Show  Mid-Year Exam  ATL Communication, Social, Self Management	A. Knowing and Understanding  C Communication	Risk Takers
Oct-Dec	Balancing Act  (Equations and Inequalities)	A Knowing and Understanding (Mid-Year Exam) C. Communicating D. Applying math in real world context	A.1, A.4	Logic principles used to build arguments and reach conclusions	Equivalence, justification, model	Scientific and technical innovation  Exploration: Mathematical puzzles, principles and discoveries	Modeling justifies equivalences by discovery and solving math	Write the equation of a word problem comparing money in the bank. Fill in the blanks from the answer to the equation: If Johnny	A. Knowing and Understanding  C. Communicating  D. Applying math in real world context	Balanced

							puzzles..	works ____ hours and Jimmy works ____ hours when they will each have \$____ in the bank.  Mid-Year Exam  ATL Critical Thinking		
Dec-Jan	Step In Time  (Linear Equations)  * Science	A. Knowing and Understanding (Mid-Year Exam)  C Communicating  D Applying math in real world context	A.4, A5, A.6, A.7	FORM  the shape and underlying structure of an entity or piece of work	Measurement Model Justification Pattern	Orientation in space and time  Exploration: Scale, duration, frequency and variability	Form models patterns when drawing to scale.	Students will research buildings, choose one and determine the slope of the line from the top of the building to where stairs would be. They will determine the number of steps.  Mid-Year Exam  ATL Social, Research	A. Knowing and Understanding  C Communicating  D Applying math in real world context	Inquirer

Jan-Feb	Systematic (Systems of Equations)	B Investigating Patterns  C Communication	A.4, A.5  A.9	Relationships- affecting large networks and systems	Representation, system, equivalence	Personal and cultural expression  Exploration: Artistry, craft, creation, beauty	Representing systems shows equivalence by exploring relationships and art.	Draw systems and make a stained glass window, organize similar equations and find solutions  ATL Literacy Skills	C Communicating	Knowledgeable
Feb-March	The Power of Powers  (Polynomial computation)	B. Investigating Patterns  C Communicating	A.2	Relationships, Logic	Patterns Model	Orientation in time and space because they will explore relationships between, and interconnectedness of global perspectives.  Exploration : Natural and human landscapes and resources	Patterns represent relationships that connect to nature and human resources.	A power point display showing examples of patterns either in nature or man made with an explanation of if they are a benefit or hindrance to our world Students will present their power point to the class.  ATL Self- management, communication	B. Investigating patterns  C Communicating	Open Minded

April-May	Little by Little (Factoring)	B Investigating Patterns	A.2 A.4	FORM- its organi zation, essenti al nature and extern al appear ance.	Change Equivalence	Personal and cultural expression  Students will explore the ways in which we discover and express ideas, , extend and enjoy our creativity; our appreciation of the aesthetic..	Creativity expressed in simplest form exhibits equivalenc e form.	Students will be given a factoring problem and must break it down to all prime factors and then create their own example, not math related that expresses breaking down to simplest form.  ATL Communicate , organize, research	B Investigating Patterns	Thinker
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Support of Personal Project:

Students reflect on their achievement and make changes to maximize success. They must have excellent management and organizational skills. Students are encouraged to be advocates for themselves and prepare projects within the designated time frame.