

James Hogg Middle School - Subject Group Overview - 2018-2019

Mathematics

MYP Year	Unit Title	Duration (hrs)	Key Concept	Related Concept(s)	Global Context	Statement of Inquiry	MYP Subject Group Objectives	Approaches to Learning Skills	Content (topic, knowledge, skills)
2	Rational Numbers and the Exploration of Elevations	72	Relationships	Equivalence, model	Orientation in space and time	The relationship between global landmarks can be represented using models.	Aii, Ci	Communication, thinking	1A-G, 2A,B, 7, 10 A-C, 11A-C
2	Travels through Linear Relationships	36	Relationships	Change, Simplification	Scientific & Technical Innovations	Mathematical principles are used to show relationships between two variables through various representations.	Biii	Communication	1A-G, 7, 10A-C, 11A,B
2	Geometry	45	Form	Model, Quantity	Scientific & Technical Innovations	Mathematical principles are used to understand how geometric models are measured and its form can serve as a tool for creativity and design	Aiii, Ci	Thinking, communication	1D, F, 4E, 5A-C, 8A-C, 9A-D, 11C

2	Finance and Data Analysis	45	Logic	Change, Representation	Scientific & Technical Innovations	The use of logic in data analysis and finance allows for the justification of mathematical principles.	Cv	Research, thinking	1B,E,F,6G, 12A,B,C,13A,B,C,E
3	Knowledgeable College-Bound Scholars	10	Relationships	Justification, quantity	Identities & relationships	Relating and justifying life-style choices to quantities over time supports goals.	Cv	Research	12C, G
3	Number Systems or Number Relationships	8	Form	Equivalence, System	Identities & relationships	Representing data and relating equivalences aids in developing systems, models, and methods.	Bii	Communication	2A

3	Equations and Inequalities in Business Plans	16	Logic	Quantity,representation	Globalization & Sustainability	Using models to represent logical quantities supports decisions in markets and commercialization Numerical values can be represented in systematic relationships that can be justified by using models.	Ai, Ci,ii,iii,iv,v	Thinking	8A,B,C
3	Functions, Proportions, Non proportions	20	Change	Model, Representation	Globalization & Sustainability	Numerical values can be changed through multiple representations and models that are used in our daily lives.	Bii,Ci, Di	Communication, thinking	5A-I
4	Unit 1:Modeling and solving Equations, functions and Inequalities	45	Relationships	Model, Representation	Identities & relationships	Multiple representations can be used to model and justify the processes and solutions for multi-step linear equations and inequalities that model real world	Ai,ii,iii	Thinking	1A,B,C,D,E,F,G

4	Unit 2: Modeling and solving Equations, functions and Inequalities	45	Connections	Justification, model	Scientific & Technical Innovations	Identifying the relationship between independent situations deepens understanding of real-life concepts.	A iii	Thinking	1A,B,C,D,E,F,G
5	Unit 1: Two-Dimensional and three-dimensional Figures	45	Relationships	Measurement, Justification	Identities & relationships	Discovering mathematical relationships can lead to a better understanding of how systems evolve.	Ai,ii,iii	Thinking	Students will use logic, both inductive and deductive reasoning to form conjectures about numerical situations and conditional statements.
5	Unit 2: Geometry Basics	25	Logic	Justification, Representation	Identities & relationships	Decision-making can be improved by using a model to represent relationships.	Ai,ii,iii	Thinking	Students will use logic, both inductive and deductive reasoning to form conjectures about numerical

