

### MCS MYP Grade 8 Mathematics Subject Group Overview

Unit Name	Investigating Linear Expressions, Equations, and Inequalities in One Variable	Modeling Linear Relationships & Functions	Investigating Data & Statistical Reasoning	Real-Life Phenomena Explored Through Systems of Linear Equations	Irrationals, Integer Exponents and Scientific Notation	Exploring Geometric Relationships	Culminating Capstone Unit
Time Frame	6 Weeks	5 -6 Weeks	3 - 4 Weeks	6 -7 Weeks	5 -6 Weeks	3 -4 Weeks	2 - 3 Weeks
Standards	8.PAR.3 8.MP. 1-8	8.PAR.4 8.FGR.5 8.MP.1-8  *7.PAR.4*	8.FGR.6 8.MP.1-8	8.FGR.7 8.MP.1-8	8.NR.1 8.NR.2 8.MP.1-8	8.GSR.8 8.MP.1-8	All course standards 8.MP.1-8
Approaches To Learning Instructional Strategies	<b>Need:</b> Give and receive meaningful feedback <b>Category:</b> Thinking <b>Cluster:</b> Critical Thinking, Creative Thinking <b>Skill Indicator:</b> Analyzing and evaluating issues and ideas and Utilizing skills and knowledge in multiple contexts	<b>Need:</b> Draw reasonable conclusions and generalizations. <b>Category:</b> Thinking <b>Cluster:</b> Critical Thinking, Creative Thinking, Transfer <b>Skill Indicator:</b> Analyzing and evaluating issues and ideas and Utilizing skills, knowledge in multiple contexts, and generating novel ideas and considering new perspective	<b>Need:</b> Give and receive meaningful feedback <b>Category:</b> Research Skills <b>Cluster:</b> Information literacy <b>Skill Indicator:</b> Finding, interpreting, judging and creating information	<b>Need:</b> Give and receive meaningful feedback. Manage and resolve conflict and work collaboratively in teams. <b>Category:</b> Communication Skills <b>Cluster:</b> Communication <b>Skill Indicator:</b> Exchanging thoughts, messages and information effectively through interaction	<b>Need:</b> Give and receive meaningful feedback <b>Category:</b> Thinking <b>Cluster:</b> Critical Thinking <b>Skill Indicator:</b> Analyzing and evaluating issues and ideas and Utilizing skills and knowledge in multiple contexts	<b>Need:</b> Give and receive meaningful feedback <b>Category:</b> Research Skills <b>Cluster:</b> Information literacy <b>Skill Indicator:</b> Finding, interpreting, judging and creating information	<b>Need:</b> Draw reasonable conclusions and generalizations. <b>Category:</b> Thinking <b>Cluster:</b> Critical Thinking, Creative Thinking, Transfer <b>Skill Indicator:</b> Analyzing and evaluating issues and ideas and Utilizing skills, knowledge in multiple contexts, and generating novel ideas and considering new perspective
Statement of Inquiry	Interpreting real-life scenarios will enhance our understanding of patterns.	Modeling the change in relationships can impact decision-making.	The choices we make affect our health and well-being.	Analyzing systems helps us make logical decisions.	Various numeric forms can be used to enhance our understanding of scientific principles.	People can explore relationships through measurement.	
Global Context	<b>Identities and Relationships</b>	<b>Globalization and sustainability</b>	<b>Identities and Relationships</b>	<b>Scientific and Technical Innovation</b>	<b>Scientific and Technical Innovation</b>	<b>Orientation in space and time</b>	
Key Concepts	Patterns	Relationships	Logic	Logic	Form	Relationships	

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<b>Related Concepts</b>	Justification, Simplification	Measurement, Space	Generalization Model	Justification System	Justification, Simplification	Measurement, Space	
<b>Design Cycle Trans-disciplinary</b>	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating	Inquiring and Analyzing Developing Ideas Creating a Solution Evaluating
<b>MYP Assessments/ Performance Tasks</b>	Unit 1 CFA Unit 1 SA Unit 1 ReTest Unit 1 MYP Project: Writing in Math - Design a Math App - Solving Equations and Inequalities  MYP Assessment: Criteria A: Knowledge and Understanding Criteria B (Investigating Patterns)	Unit 2 CFA Unit 2 SA Unit 2 ReTest Unit 2 MYP Project: Family Reunion Catering Project  <i>MYP Assessment:</i> Criteria A (Knowing and Understanding), Criteria B (Investigating Patterns), Criteria C (Communication), Criteria D (Applying Math to real-world context)	Unit 3 CFA Unit 3 SA Unit 3 ReTest Unit 3 MYP Project: Savvas Topic 4 Performance Task Form A pg. 1 only  <i>MYP Assessment</i> : Criteria A (Knowing and Understanding), Criteria D (Applying Math to real-world context)	Unit 4 CFA Unit 4 SA Unit 4 ReTest Unit 4 MYP Project: Plan a City Project  <i>MYP Assessment</i> : Criteria D (Applying Math to real-world context)	Unit 5 CFA Unit 5 SA Unit 5 ReTest Unit 5 MYP Project: Savvas Topic 1 Performance Task Form B.  <i>MYP Assessment</i> : Criteria A (Knowing and Understanding), Criteria B (Investigating Patterns), Criteria C (Communication), Criteria D (Applying Math to real-world context)	Unit 6 CFA Unit 6 SA Unit 6 ReTest Unit 6 MYP Project: Pythagorean Theorem Fencing the Yard Project  <i>MYP Assessment</i> : Criteria A (Knowing and Understanding)	Grade 8 EOG
<b>Differentiation For Tiered Learners</b>	Marietta City Schools teachers provide specific differentiation of learning experiences for all students. Details for differentiation for learning experiences are included on the district unit planners.						