

## MCS MYP Honors Geometry: Concepts & Connections Subject Group Overview

Unit Name	U1 Polynomial Expressions	U2 Geometric Foundations, Constructions and Proof	U3 Congruence	U4 Similarity	U5 Right Triangle Trigonometry	U6 Circles	U7 Equations & Measurement	U8 Probability & Statistics	U9 Culminating Capstone Unit
Time Frame	2-3 weeks	3-4 weeks	4-5 weeks	4-5 weeks	2-3 weeks	5-6 weeks	3-4 weeks	6-7 weeks	1-2 weeks
Standards	G.PAR.2 G.MP.1-8 G.MM.1	G.GSR.4 G.MM.1 G.MP.1-8  8.FGR.7.2, 7.5* A.GSR.3.1, 3.2*	G.GSR.3 G.MM.1 G.MP.1-8	G.GSR.5 G.MM.1 G.MP.1-8	G.GSR.6 G.MM.1 G.MP.1-8	G.GSR.8 G.GSR.7 G.MM.1 G.MP.1-8	G.GSR.9 G.MM.1 G.MP.1-8	G.PR.10 G.DSR.11 G.MM.1 G.MP.1-8	ALL STANDARDS G.MP.1-8
Approaches To Learning Instructional Strategies	Combine knowledge, understanding & skills to create products or solutions	Combine knowledge, understanding & skills to create products or solutions	- Use and interpret a range of discipline-specific terms and symbols - Consider content: What did I learn about today? What don't I understand yet? What questions do I have now?	- Practice "bouncing back" after adversity, mistakes, and failures - Combine knowledge, understanding & skills to create products or solutions	- Change the context of inquiry to gain a different perspective - Propose and evaluate a variety of solutions	- Combine knowledge, understanding & skills to create products or solutions - Apply skills and knowledge in unfamiliar disciplines	- Use and interpret a range of discipline-specific terms and symbols - Change the context of inquiry to gain a different perspective	- Collect and analyze data to identify solutions and make informed decisions - Process data and report results	- Analyze complex concepts and projects into their constituent parts and synthesize them to create new understanding
Statement of Inquiry	Logic can help us understand modeling and equivalence when determining a strategy for urban planning & infrastructure.	Students will explore relationships and generalizations to discover the models and systems of geometric constructions.	Logic and justifications can be used as tools to form and craft geometric patterns and tessellations.	Relationships can be discovered from different patterns to compare scale and variability among similar objects.	Students will explore relationships and patterns to discover models of equivalence within right triangles.	Analyzing the forms and patterns of circles can help to discover mathematical principles.	Relationships between 3D models and representations can be used to help with urban planning and infrastructure.	Using logic to analyze models and validity of data, students can determine the fairness of human capability and development.	Relationships between systems and patterns in geometry can be combined to show growth and personal efficacy.

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<b>Global Context</b>	Globalization & Sustainability - Urban planning, strategy & infrastructure	Scientific and Technical Innovation - Systems, models, methods; products, processes, and solutions	Personal and Cultural Expression - Artistry, craft, creation, beauty	Orientation in Space & Time - Scale, duration, frequency, and variability	Scientific and Technical Innovation - Mathematical puzzles, principles, and discoveries	Scientific and Technical Innovation - Mathematical puzzles, principles, and discoveries	Globalization & Sustainability - Urban planning, strategy & infrastructure	Fairness and Development - Human capability and development; social entrepreneurs	Identities and Relationships - Personal efficacy and agency; attitudes, motivation, independence; happiness and the good life
<b>Key Concepts</b>	Logic	Relationships	Form	Relationships	Relationships	Form	Relationships	Logic	Relationships
<b>Related Concepts</b>	Simplification, Equivalence, Models	Models, Systems, Generalizations	Logic, Justification, Patterns	Change, Patterns	Patterns, Models, Equivalence	Equivalence, Patterns	Representation, Models	Models, Validity	Systems, Patterns
<b>Design Cycle Transdisciplinary</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	Inquiring and Analyzing,  Developing Ideas, Creating a Solution, Evaluating	Inquiring and Analyzing,  Developing Ideas, Creating a Solution, Evaluating
<b>MYP Assessments/ Performance Tasks</b>	MYP A Knowledge and Understanding	MYP A Knowledge and Understanding	MYP C Communication	MYP B Patterns	MYP D Applications	MYP A Knowledge and Understanding  MYP B Patterns	MYP C Communication  MYP D Applications		
<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. -SWD/504- Accommodations provided -ELL- Five Principle ELL Curriculum Framework and Vocabulary Supports -Intervention Support- Re-teaching Activities in Small Groups with Progress Monitoring -Extensions- Enrichment Tasks and Projects								