Marietta City Schools

2024–2025 District Unit Planner

Grade 7 Mathematics

Unit title	Unit 4: Making Relevant Connections with Geometry	MYP year		2	Unit duration (hrs)	*22.5 hours*

Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): *What will students learn?*

GA DoE Standards

Standards

7.GSR.5 Solve practical problems involving angle measurement, circles, area of circles, surface area of prisms and cylinders, and volume of cylinders and prisms composed of cubes and right prisms.

7.MP: Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals.

Concepts/Skills to support mastery of standards

- Measure angles with and without a protractor. (GSR 5.1-5.2)
- Solve multi-step with supplementary, complementary, and vertical angles.(GSR 5.3)
- Derive the formulas for circumference and area of a circle.(GSR 5.4)
- Describe the relationship between pi and radius and diameter.(GSR 5.4)
- Solve real-world problems given the formulas for the area and circumference.(GSR 5.5)
- Solve real-world problems involving surface area of right prisms and cylinders.(GSR 5.6)
- Describe cross-sections from slicing three-dimensional figures. (GSR 5.7)
- Find the volume of geometric figures and explore volume as a measurable attribute of cylinders and right prisms(GSR 5.8)

Vocabulary

Area	Circumference	Supplementary angles	Complementary angles	Vertical angles	Pi
Radius	Diameter	Adjacent angles	Two-dimensional	Volume	Three-dimensional

Key concept	Related concept(s)	Global context
Form The shape and underlying structure of an entity or piece of work, including its organization, essential nature and external appearance.	**Measurement, Space**	**Orientation in space and time**

Statement of inquiry
We can use formulas to model structures and relationships in the real world.

Inquiry questions

Factual

- What is pi?
- What is the relationship between supplementary angles?
- What is the relationship between complementary angles?
- What is a cross-section?

Conceptual

- How are all circles related?
- How are area and circumference of a circle related?
- How do relationships between sides and angles help you identify and describe shapes?

Debatable

- Is there a best method for finding surface area?

MYP Objectives	Assessment Tasks	
What specific MYP __objectives__ will be addressed during this unit?	*Relationship between summative assessment task(s) and statement of inquiry:*	*List of common formative and summative assessments.*

		Formative Assessment(s):
Criterion A: Knowing and Understanding		Unit 4 CFA
Criterion B: Investigating Patterns		**Summative Assessment(s):**
Criterion C: Communication in Mathematics		Unit 4: Geometry
Criterion D: Applying mathematics in real-life contexts		MYP: Pizza Task

Approaches to learning (ATL)

Category: Self Management
Cluster: Organization, Affective, & Reflection Skills
Skill Indicator: Keep an organized and logical system of information files/notebooks.

Category: Social
Cluster: Collaboration Skills
Skill Indicator: Give and receive meaningful feedback.
Category: Thinking
Cluster: Critical Thinking, Creative Thinking & Transfer
Skill Indicator: Apply skills and knowledge in unfamiliar situations.

	Learning Experiences	
	Add additional rows below as needed.	
Objective or Content	**Learning Experiences**	**Personalized Learning and Differentiation**
7.MP: Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals. 7.GSR.5 Solve practical problems involving angle measurement, circles, area of circles, surface area of prisms and cylinders, and volume of cylinders and prisms composed of cubes and right prisms. • 7.GSR.5.1 Measure angles in whole non-standard units. • 7.GSR.5.1 Measure angles in whole nonstandard units. • 7.GSR.5.2 Measure angles in whole number degrees using a protractor.	CLE - Which Wedge is Right	In this learning plan, students will use a non-standard measurement for angles and then explore finding the measurement of angles using common-sized wedges.
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Content Resources		