



**Marietta City Schools**  
**2023–2024 District Unit Planner**

*Enhanced Algebra: Concepts & Connections (Grade 8)*

|                   |  |                 |   |                            |  |
|-------------------|--|-----------------|---|----------------------------|--|
| <b>Unit title</b> | <i>Unit 8: Culminating Capstone Unit</i> | <b>MYP year</b> | 3 | <b>Unit duration (hrs)</b> | <i>Enter Hours</i><br><i>MSGA- (5 hours per week)</i><br><i>MMS- (4.5 hours per week)</i><br><i>MHS- (7.5 hours per 2 weeks)</i> |
|-------------------|--|-----------------|---|----------------------------|--|

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

**GA DoE Standards**

**Standards**

**All standards addressed in this course.**

**A.MM.1:** Apply mathematics to real-life situations; model real-life phenomena using mathematics

**A.MM.1.1** Explain applicable, mathematical problems using a mathematical model.

**Fundamentals**

- Students should be provided with opportunities to learn mathematics in the framework of real-life problems.
- Mathematically applicable problems are those presented in which the given framework makes sense, realistically and mathematically, and allows for students to make decisions about how to solve the problem (model with mathematics).

**A.MM.1.2** Create mathematical models to explain phenomena that exist in the natural sciences, social sciences, liberal arts, fine and performing arts, and/or humanities domains.

**Fundamentals**

- Students should be able to use the content learned in this course to create a mathematical model to explain real-life phenomena.

**A.MM.1.3** Use units of measure (linear, area, capacity, rates, and time) as a way to make sense of conceptual problems; identify, use, and record appropriate units of measure within the given framework, within data displays, and on graphs; convert units and rates using proportional reasoning given a conversion factor; use units within multi-step problems and formulas; interpret units of input and resulting units of output.

**Strategies and Methods**

- Dimensional analysis may be used when converting units and rates.

**Examples**

- Units of measure may include linear, area, capacity, rates, and time.

**A.MM.1.4** Use various mathematical representations and structures with this information to represent and solve real-life problems.

**Strategies and Methods**

- Students should be able to fluently navigate between mathematical representations that are presented numerically, algebraically, and graphically.

- For graphical representations, students should be given opportunities to analyze graphs using interactive graphing technologies.
- A.MM.1.5** Define appropriate quantities for the purpose of descriptive modeling.
- Fundamentals**
- Given a situation, framework, or problem, students should be able to determine, identify, and use appropriate quantities for representing the situation.

**Concepts/Skills to support mastery of standards**

The capstone unit applies content that has already been learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question.

**Vocabulary**

**Notation**

**Standards**

All standards addressed in this course.

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| MYP Objectives | Assessment Tasks |  |

|  |   |  |  |
|--|---|--|--|
| What specific MYP <b><u>objectives</u></b> will be addressed during this unit? | <b><i>Relationship</i></b> between summative assessment task(s) and statement of inquiry: |  | <i>List of common formative and summative assessments.</i>                           |
|  |   |  | <b><u>Formative Assessment(s):</u></b><br><br><b><u>Summative Assessment(s):</u></b> |
| Approaches to learning (ATL)   |   |  |  |
| Category:<br>Cluster:<br>Skill Indicator:                                      |   |  |  |

| <u>Learning Experiences</u><br>Add additional rows below as needed. |  |   |
|---|--|---|
| Objective or Content  | Learning Experiences   | Personalized Learning and Differentiation |
|   | Due to the initial year of implementation and delay in state resources, we are currently in the process of developing Capstone Units for the 2024-2025 School year |   |
|   |  |   |
|   |  |   |
| Content Resources   |  |   |
|   |  |   |