



**Marietta City Schools**  
**2025–2026 District Unit Planner**

*Honors Grade 6 Mathematics*

<b>Unit title</b>	Unit 2: Making Relevant Connections through Number System Fluency	<b>MYP year</b>	1	<b>Unit duration (hrs)</b>		<i>20 hours total</i>
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**Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): *What will students learn?***

**GA DoE Standards**

**Standards**

**6.NR.1:** Solve relevant, mathematical problems involving operations with whole numbers, fractions, and decimal numbers.

6.NR.1.1 Fluently add and subtract any combination of fractions to solve problems.

6.NR.1.2 Multiply and divide any combination of whole numbers, fractions, and mixed numbers using a student-selected strategy. Interpret products and quotients of fractions and solve word problems.

6.NR.1.3 Perform operations with multi-digit decimal numbers fluently using models and student-selected strategies.

**6.NR.2** Apply operations with whole numbers, fractions and decimals within relevant applications.

6.NR.2.1 Describe and interpret the center of the distribution by the equal share value (mean).

6.NR.2.3 Interpret numerical data to answer a statistical investigative question created. Describe the distribution of a quantitative (numerical) variable collected, including its center, variability, and overall shape.

6.NR.2.4 Design simple experiments and collect data. Use data gathered from realistic scenarios and simulations to determine quantitative measures of center (median and/or mean) and variability (interquartile range and range). Use these quantities to draw conclusions about the data, compare different numerical data sets, and make predictions.

**6.MP.1-8**

**MCS.Gifted.S2** Students will develop and utilize creative thinking through a variety of products and problem solving.

**MCS.Gifted.S3C** Use a variety of strategies for solving authentic, complex, real world problems through evaluative thinking and the engineering design processes.

**MCS.Gifted.S4B** Recognize and examine the value of others strengths, thoughts, ideas, and feelings during collaboration.

**MCS.Gifted.S4D** Respectfully collaborate and effectively communicate exchanges of constructive/critical feedback.

**MCS.Gifted.S6** Students will become self-directed, independent learners.

6.NR.1.3	Perform operations with multi-digit decimal numbers fluently using models and student-selected strategies.	<b>Fundamentals</b> <ul style="list-style-type: none"> <li>Fluently/Fluency – Students choose flexibly among methods and strategies to solve mathematical problems accurately and efficiently.</li> </ul>	<b>Strategies and Methods</b> <ul style="list-style-type: none"> <li>Students should be able to use a variety of part-whole strategies to compute efficiently (area model, partial product, partial quotient).</li> <li>The part-whole strategies used should be flexible and extend from previous computation strategies and future work with computation.</li> <li>Students should use models and student-selected strategies as an efficient written method of demonstrating place value understanding for each operation (addition, subtraction, multiplication, and division).</li> <li>Students may solve problems in different ways and have the flexibility to choose a mathematical strategy that allows them to make sense of and strategically solve problems using efficient methods that are most comfortable for and makes sense to them.</li> </ul>	<b>Terminology</b> <ul style="list-style-type: none"> <li>Decimal number – a number whose whole number part and fractional part are separated by a decimal point.</li> </ul>
6.NR.2.1	Describe and interpret the center of the distribution by the equal share value (mean).	<b>Age/Developmentally Appropriate</b> <ul style="list-style-type: none"> <li>The concept of mean should be explored visually and conceptually before introducing the formula.</li> <li>This is the beginning of the progression of the concept of measures of center and will continue to be developed in 6<sup>th</sup> grade.</li> </ul>	<b>Strategies and Methods</b> <ul style="list-style-type: none"> <li>Students should be given the opportunity to use manipulatives such as: snap cubes, tiles, etc...to model equal share value.</li> </ul>	<b>Example</b> <ul style="list-style-type: none"> <li>"If we combined all of the 5th grade students' candies and shared them equally with each student so everyone has the same number of candies." (This is the mean or equal share value.)</li> </ul>

		<p>(symmetrical vs non-symmetrical).</p> <ul style="list-style-type: none"> <li>• Data sets can be limited to no more than 10 data points when exploring the mean absolute deviation.</li> <li>• Students should be able to describe the nature of the attribute under investigation, including how it was measured and its units of measurement.</li> </ul>			MAD; Arthur has less variability than Aaron.
6.NR.2.4	Design simple experiments and collect data. Use data gathered from realistic scenarios and simulations to determine quantitative measures of center (median and/or mean) and variability (interquartile range and range). Use these quantities to draw conclusions about the data, compare different numerical data sets, and make predictions.	<p><b>Fundamentals</b></p> <ul style="list-style-type: none"> <li>• Students should be able to use quantitative measures of center and variability to draw conclusions about data sets and make predictions based on comparisons.</li> <li>• Students should be able to identify that each quartile represents 25% of the data set.</li> </ul>		<p><b>Strategies and Methods</b></p> <ul style="list-style-type: none"> <li>• Students should apply understanding of the measures of center (mean, median) and variability (interquartile range and range) to determine quantitative measures of center and variability, draw conclusions about the data, compare different-numerical data sets and make predictions using data gathered from realistic scenarios and simulations.</li> </ul>	

**Vocabulary:** [K12 Mathematics Glossary](#)

Algorithm	Difference	Measurement Model of	Quotient	Dividend	Median
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		Division			
Reciprocal	Divisor	Multiple	Skewed Data	Factor	Partitive Model of Divisions
Subtrahend	Mean	Product	Sum		

Key concept	Related concept(s)	Global context
<p>Logic</p> <p>A method of reasoning and a system of principles used to build arguments and reach conclusions.</p>	<p>Model</p> <p>Representation</p>	<p>Globalization and Sustainability</p>

**Statement of inquiry**

Making decisions can be improved by using a model to represent relationships.

**Inquiry questions**

**Factual**—How do you add or subtract decimals? How do you divide whole numbers and decimals? How do you divide a fraction by a fraction?

**Conceptual**—How do you use decimal operations to solve real-world problems? How are decimal/fraction operations similar to whole number operations? In what situations do we use division in our lives? When is it useful to decompose a number?

**Debatable**— Does being fluent in operations with decimal operations make our everyday lives easier?

MYP Objectives	Assessment Tasks	
<p><i>What specific MYP <b>objectives</b> will be addressed during this unit?</i></p>	<p><i><b>Relationship</b> between summative assessment task(s) and statement of inquiry:</i></p>	<p><i>List of common formative and summative assessments.</i></p>

<p>Criterion A: Knowing and Understanding</p> <p>Criterion D: Applying Mathematics in Real-life Contexts</p>	<p>Students are encouraged to use a variety of strategies to solve problems encountered in the tasks.</p>	<p><b><u>Formative Assessment(s):</u></b> Common Formative Assessments</p> <p><b><u>Summative Assessment(s):</u></b> Unit 2 Summative unit test</p>
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**Approaches to learning (ATL)**

<p><b>Category:</b> Social</p> <p><b>Cluster:</b> Collaboration Skills</p> <p><b>Skill Indicator:</b></p> <ul style="list-style-type: none"> <li>● Give and receive meaningful feedback.</li> </ul>
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**Learning Experiences**

Add additional rows below as needed.

<b>Objective or Content</b>	<b>Learning Experiences</b>	<b>Personalized Learning and Differentiation</b>
6.NR.1 Solve real-life, mathematical problems involving operations with whole numbers, fractions and decimal numbers.  6.NR.2 Apply operations with whole numbers, fractions and decimals within relevant applications.	<b>Georgia DOE Task: What is the Average?</b> In this learning plan, students will complete tasks to build fluency with the addition of fractions while finding mean and median. Students will leverage their understanding of addition and fractions. Students should draw on their earlier experiences with properties of addition and strategies for making sense of solving problems.	Provide visuals and information virtually on the class platform. Provide paper copies of slides or pages showing the four choices of graphs. Have students complete the task and submit using paper or the means established by the teacher.

**Content Resources**

Savvas- Topic 1  
Illustrative Mathematics  
NCTM Illuminations  
GaDOE Frameworks  
Number Lines, Fraction Models, Visual Models, and Various Physical Manipulatives.