GREEN TOWNSHIP SCHOOL DISTRICT

Content Area: **Mathematics**

Course/Grade Level: **5th Grade**

Curriculum Committee Members: Grade Level Staff Members

Principal:
Jon Paul Bollette

Board Approval Date:
2/18/26

Mission:

A New Jersey education in Mathematics builds quantitatively and analytically literate citizens prepared to meet the demands of college and career, and to engage productively in an information-driven society. All students will have access to a high-quality mathematics education that fosters a population that:

- **leverages data in decision-making and as a lens for discussing, analyzing, and responding to practical questions.**
- **persists to make sense of and model problems arising in everyday life, society, and the workplace.**
- **thinks critically and strategically to assess quantitative relationships and to solutions to complex problems.**
- **employs precise reasoning and constructs viable arguments to deduce conclusions, recognize false statements and assess peers' reasoning.**
- **interprets, evaluates and critiques the mathematics embedded in social, scientific and commercial systems, as well as the claims made in the private and public sectors.**
- **communicates precisely when conveying, representing, and justifying both qualitative and quantitative perspectives.**

Key Performance and Benchmark Tasks/Assessments
<u>Resources for help in creating assessments</u>
Formative assessments: ● Exit Tickets ● Homework ● Sprints ● Mini Quiz
Summative Assessments: Examples may include: ● Quiz ● Unit Test
Benchmark Assessments: ● Teacher-created benchmark assessments to be given periodically during the year.
Alternative Assessments: ● Teacher modifies assignments and activities based on student needs. ● Oral assessments administered in place of written when necessary. ● Accommodation and modification ideas may be found here: ○ Modifications & Accommodations Menu ○ *Assessments other than paper & pencil tests See link for more info: http://education.gmu.edu/assets/docs/forms/mirs/assessment_brochure.pdf*

Integrated Accommodations & Modifications

Please utilize the link below for ideas and strategies to use with ***ELL, Students with IEPS & 504s, At-Risk Students and Gifted & Talented Students***.

The attached worksheets can be printed ahead of each unit during the planning phase to help the teacher plan for the needs of particular students in each class, allowing for differentiation per unit and per year. The worksheets contain suggested accommodations and modifications for Content & Material, Student Organization, Instructional Strategies, Assessments, Attention/Focus, Written Language, and Social/Behavioral.
Modifications & Accommodations Menu

Unit 1

Place Value Concepts for Multiplication and Division with Whole Numbers	**Pacing:** 5 weeks
Unit Summary: Place Value Understanding for Whole Numbers Multiplication of Whole Numbers Division of Whole Numbers Multi-Step Problems with Whole Numbers	
Essential Questions: ● Why is understanding place value important when performing operations? ● How does understanding place value help us multiply large numbers? ● How can we determine which operations to use to solve a problem?	**Enduring Understandings:** ● Place value understanding supports accurate computation and number sense.

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. 5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as . Recognize that is three times as large as without having to calculate the indicated sum or product.	Students notice how digits of a number shift when they multiply or divide by a power of 10 and express a power of 10 in exponential form. Students build fluency with multiplying multi-digit numbers by using the standard algorithm. Students use methods based on place value to find quotients of whole numbers with up to four-digit dividends and two-digit divisors.	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively. MP3 Construct viable arguments and critique the reasoning of others. MP4 Model with mathematics. MP5 Use appropriate tools

5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and of what it represents in the place to its left. 5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. 5.NBT.B.5 With accuracy and efficiency, multiply multi-digit whole numbers using the standard algorithm. 5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	Students move between written, pictorial, and numeric representations of mathematical statements.	strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 1: Core Unit Content

Vocabulary	*Key Concepts*
❏ Centigram ❏ Centiliter ❏ Centimeter ❏ Convert ❏ Distributive property ❏ Divisor ❏ Dividend ❏ Express ❏ Exponent ❏ Exponential form ❏ Factor ❏ Kilogram ❏ Kiloliter ❏ Milligram ❏ Millimeter ❏ Partial Products ❏ Partial quotients	❏ Place Value Understanding for Whole Numbers ❏ Multiplication of Whole Numbers ❏ Division of Whole Numbers ❏ Multi-Step Problems with Whole Numbers

❏ Power of 10 ❏ Quotient ❏ Remainder ❏ Standard Algorithm	

Unit 1: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 1: Assessments
Formative assessments: • Exit Tickets • Homework • Sprints • Mini Quiz
Summative Assessments: • Quiz • Unit Test
Alternative Assessments: Teacher modifies assignments and activities based on student needs. • Small Group • Oral assessments administered in place of written when necessary. • Accommodation and modification ideas may be found here: ○ Modifications & Accommodations Menu ○ *Assessments other than paper & pencil tests See link for more info: http://education.gmu.edu/assets/docs/forms/mirs/assessment_brochure.pdf*

Unit 1: Accommodations & Modifications

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Modifications & Accommodations Menu

Unit 2

Place Value Concepts for Decimal Operations	**Pacing:** 6 weeks
Unit Summary: Understanding Decimal Numbers with Place Value and Fraction Thinking Addition and Subtraction of Decimal Numbers Multiplication of Decimal Numbers Applications of Decimals	
Essential Questions: ● How are decimals and fractions connected? ● Why is it important to line up the decimal points when adding or subtracting decimals? ● How does multiplying by a decimal change the size of a number? ● How can understanding decimals help us solve real-world problems?	**Enduring Understandings:** ● Decimal numbers can be represented, read, and written in multiple forms, and their place value helps us understand and compare them. ● Operations with decimals (addition, subtraction, multiplication, and division) follow the same principles as whole numbers and can be applied accurately using models and strategies. ● Understanding decimals, fractions, and their relationships allows us to solve real-world problems, including measurement conversions in metric and customary systems.

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. 5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as . Recognize that is three times as large as without having to calculate the indicated sum or product. 5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and of what it represents in the place to its left. 5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. 5.NBT.A.3 Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., .	Students represent decimal numbers to thousandths by using a variety of concrete and pictorial models and name the numbers in different forms. Students apply the methods they use to add and subtract whole numbers to add and subtract decimal numbers. Students apply the methods they use to multiply whole numbers to multiply decimal numbers to hundredths. Students apply the methods they use to divide whole numbers to divide decimal numbers to hundredths. Students apply their understanding of decimal place value, relationships between decimals and fractions, and computation with decimals, fractions, and whole numbers to convert measurements in both the metric and customary measurement systems.	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively. MP3 Construct viable arguments and critique the reasoning of others. MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. 5.NBT.A.4 Use place value understanding to round decimals to any place. 5.NBT.B.7Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems		

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 2: Core Unit Content

Vocabulary	*Key Concepts*
❏ Associative Property of Multiplication; ❏ Commutative Property of Multiplication; ❏ Compare; ❏ Distributive Property; ❏ Expanded Form; ❏ Exponent; ❏ Hundredths; ❏ Inequality; ❏ Long division; ❏ Powers of 10; ❏ Round; ❏ Tenths; ❏ Thousandths	❏ Understanding Decimal Numbers with Place Value and Fraction Thinking ❏ Addition and Subtraction of Decimal Numbers ❏ Multiplication of Decimal Numbers ❏ Applications of Decimals

Unit 2: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 2: Assessments
Formative assessments: • Exit Tickets • Homework • Sprints • Mini Quiz

Summative Assessments:

- Quiz
- Unit Test

Alternative Assessments:

- Small Group
- Teacher modifies assignments and activities based on student needs.
- Oral assessments administered in place of written when necessary.
- Accommodation and modification ideas may be found here:
    - Modifications & Accommodations Menu
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Unit 2: Accommodations & Modifications

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Modifications & Accommodations Menu

Unit 3

Addition and Subtraction with Fractions	**Pacing:**5 weeks
Unit Summary: Fractions and Division Addition and Subtraction of Fractions Making Like Units Addition and Subtraction of Fractions, Whole Numbers, and Mixed Numbers *Perimeter with fractional side lengths Problem Solving and Line Plots with Fractional Measurements	
Essential Questions: ● How can we represent a fraction as division and use that to solve problems? ● How can we use equivalent fractions to find common denominators? ● How can we add and subtract fractions, mixed numbers, and whole numbers in real-world situations? ● How can line plots help us represent and interpret data with fractional measurements?	**Enduring Understandings:**: ● A fraction shows how many parts of a whole we have when we divide the numerator by the denominator. ● To add or subtract fractions and mixed numbers, we need to make like units and use what we know about whole numbers. ● We can display data visually, like on a line plot, to understand and analyze information.

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.	Students understand a fraction as the result of dividing the numerator by the denominator. Students use models and equations to make like units before they add and subtract fractions.	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively. MP3 Construct viable arguments and critique the reasoning of

5.NF.A.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. 5.NF.B.3 Interpret a fraction as division of the numerator by the denominator (i.e.,$\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. 5.DL.B.5 Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Use operations on fractions for this grade to solve problems involving information presented in line plots.	Students apply knowledge of addition and subtraction of whole numbers to help them add and subtract mixed numbers. Students create line plots from a given set of data.	others. MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.

9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 3: Core Unit Content	
Vocabulary	***Key Concepts***
❏ Common Denominator; ❏ Conclude; ❏ Denominator; ❏ Equivalent Fractions; ❏ Fraction Form; ❏ Minuend; ❏ Mixed Number; ❏ Numerator; ❏ Subtrahend	❏ Fractions and Division ❏ Addition and Subtraction of Fractions Making Like Units ❏ Addition and Subtraction of Fractions, Whole Numbers, and Mixed Numbers *Perimeter with fractional side lengths ❏ Problem Solving and Line Plots with Fractional Measurements

Unit 3: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 3: Assessments
Formative assessments: • Exit Tickets • Homework • Sprints

- Mini Quiz

Summative Assessments:
- Quiz
- Unit Test

Alternative Assessments:
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Unit 3: Accommodations & Modifications

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Modifications & Accommodations Menu

Unit 4

Multiplication and Division with Fractions	**Pacing:**6 weeks
Unit Summary: Multiplication of a Whole Number by a Fraction Multiplication of Fractions Division with a Unit Fractions and a Whole Number Multi-Step Problems with Fractions	
Essential Questions: ● How can multiplying by a fraction change the size of a number? ● What does it mean to multiply a fraction by a fraction? ● What happens when we divide a unit fraction by a whole number and vice versa? ● How do we decide which operations to use when solving multi-step fraction problems?	**Enduring Understandings:** ● Fractions can represent parts of a whole or parts of a set, and we can find these amounts using models. ● Multiplying and dividing fractions can be solved using area models, number lines, and tape diagrams. ● Converting units and solving multi-step problems helps us apply fractions and operations in real-world situations.

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Students will find fractions of a set and then fractions of a whole. Students will convert customary units.	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively.

5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. 5.NF.B.4 Interpret the product $\left(\frac{a}{b}\right) \times q$ as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. 5.NF.B.5 a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. 5.NF.B.5 b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of $\frac{a}{b}$ multiplying by 1. 5.NF.B.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. 5.NF.B.7.a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. 5.NF.B.7.b Interpret division of a whole number by a unit fraction, and compute such quotients.	Students use area models and number lines to multiply fractions by unit fractions and then fractions by fractions. Students use tape diagrams and number lines to divide a whole number by a unit fraction and to divide a unit fraction by a whole number. Students will solve multi-step problems involving grouping symbols.	MP3 Construct viable arguments and critique the reasoning of others. MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

5.NF.B.7.c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. 5.M.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.		

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 4: Core Unit Content

Vocabulary	*Key Concepts*
❏ Convert; ❏ Cup; ❏ Denominator; ❏ Gallon; ❏ Mixed Number; ❏ Numerator;	❏ Multiplication of a Whole Number by a Fraction ❏ Multiplication of Fractions ❏ Division with a Unit Fractions and a Whole Number

❏ Ounce; ❏ Pint; ❏ Pound; ❏ Product; ❏ Quart; ❏ Quotient; ❏ Whole Number	❏ Multi-Step Problems with Fractions

Unit 4: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 4: Assessments

Formative assessments:
- Exit Tickets
- Homework
- Sprints
- Mini Quiz

Summative Assessments:
- Quiz
- Unit Test

Alternative Assessments:
- Small Group
- Teacher modifies assignments and activities based on student needs.
- Oral assessments administered in place of written when necessary.

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Unit 4: Accommodations & Modifications

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Modifications & Accommodations Menu

Unit 5

Addition and Multiplication with Area and Volume	**Pacing:**4 weeks
Unit Summary: Drawing, Analysis, and Classification of Two-Dimensional Figures Areas of Rectangular Figures with Fraction Side Lengths Volume Concepts Volume and the Operations of Multiplication and Addition	
Essential Questions: ● What relationships exist among different types of quadrilaterals? ● How can we find the area of rectangles with fractional side lengths? ● Volume can also be found by decomposing figures and adding the volumes of smaller prisms. ● How can we determine the volume of a rectangular prism?	**Enduring Understandings:** ● Relationships among shapes help us understand geometric structures and hierarchy (e.g., all squares are rectangles).

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.NF.B.4 Interpret the product $\left(\frac{a}{b}\right) \times q$ as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. 5.NF.B.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. 5.M.2 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	Students construct, analyze, classify and, identify properties of quadrilaterals. Students will use the hierarchy to determine the most specific name of any quadrilateral and all names for the quadrilateral. Students find areas of rectangles with fraction side lengths. Students will compose and decompose right	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively. MP3 Construct viable arguments and critique the reasoning of others. MP4 Model with mathematics. MP5 Use appropriate tools

5.M.2.a A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. 5.M.2.b A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units. 5.M.B.3 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units. 5.M.B.4 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 5.M.B.4.a Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. 5.M.B.4.b Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.	rectangular prisms into layers in different ways, finding the volume of each layer and multiplying the number of layers by the volume of each layer to find the volume of the right rectangular prism. Student will calculate the volume of any right rectangular prism by multiplying the area of the base by the height, V = B × h, or by multiplying the three dimensions of the prism, V = l × w × h.	strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

5.M.B.4.c Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. 5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. 5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties.		

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

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9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 5: Core Unit Content

Vocabulary	*Key Concepts*
❏ Acute Angle; ❏ Acute Triangle; ❏ Attribute; ❏ Base; ❏ Capacity;	❏ Drawing, Analysis, and Classification of Two-Dimensional Figures ❏ Areas of Rectangular Figures with Fraction Side Lengths

- ❏ Composite Figure;
- ❏ Cube;
- ❏ Cubic Centimeter;
- ❏ Cubic Inch;
- ❏ Cubic Unit;
- ❏ Diagonal;
- ❏ Edge;
- ❏ Equilateral Triangle;
- ❏ Face;
- ❏ Figure;
- ❏ Formula;
- ❏ Height;
- ❏ Intersect;
- ❏ Isosceles Triangle;
- ❏ Kite;
- ❏ Line of Symmetry;
- ❏ Liquid Volume;
- ❏ Midpoint;
- ❏ Parallel;
- ❏ Parallelogram;
- ❏ Perpendicular;
- ❏ Plane;
- ❏ Property;
- ❏ Quadrilateral;
- ❏ Rectangle;
- ❏ Rhombus;
- ❏ Right Angle;
- ❏ Right Rectangular Prism;
- ❏ Right Triangle;
- ❏ Square;
- ❏ Square Unit;
- ❏ Straight Angle;
- ❏ Supplementary Angles;
- ❏ Three-Dimensional Figure;

- ❏ Volume Concepts
- ❏ Volume and the Operations of Multiplication and Addition

❏ Trapezoid; ❏ Two-Dimensional Figure; ❏ Unit Cube; ❏ Unit Square; ❏ Vertex; ❏ Volume	

Unit 5: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 5: Assessments

Formative assessments:
- Exit Tickets
- Homework
- Sprints
- Mini Quiz

Summative Assessments:
- Quiz
- Unit Test

Alternative Assessments:
- Small Group
- Teacher modifies assignments and activities based on student needs.
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Unit 5: Accommodations & Modifications

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Modifications & Accommodations Menu

Unit 6

Foundations to Geometry in the Coordinate Plane	**Pacing:**4 weeks
Unit Summary: Coordinate Systems Patterns in the Coordinate Plane Solve Mathematical Problems in the Coordinate Plane Solve Real-World Problems with the Coordinate Plane	
Essential Questions: ● What is a coordinate system and how do the x- and y-axes relate to an ordered pair? ● How do you plot or locate a point using coordinates? ● What relationships (addition, subtraction, multiplication, scaling) can you observe when you graph corresponding terms of two sequences? ● How can we use coordinates to reason about relationships such as distance or movement? ● How do we interpret coordinates in context (e.g., in a map or grid)?	**Enduring Understandings:**: ● Number lines can be used to create a coordinate system to locate and represent points. ● Points on the coordinate plane can be described using ordered pairs and patterns can help find missing numbers. ● The coordinate plane helps us organize data and solve real-world problems.

New Jersey Student Learning Standards	Student Learning Objectives	Practices
5.G.A.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered	Students build on their understanding of number lines to construct a coordinate system of intersecting horizontal and vertical number lines.	MP1 Make sense of problems and persevere in solving them. MP2 Reason abstractly and quantitatively. MP3 Construct viable arguments and critique

pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). 5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. 5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. 5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties. 5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. 5.NF.B.4.a Interpret the product $\left(\frac{a}{b}\right) \times q$ as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. 5.NF.B.4.b Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the	Students plot points and identify ordered pairs for points. Students will work to find missing numbers in the number pattern using given rules. Students will recognize that the coordinate plane is a way to represent data and solve real-world problems	the reasoning of others. MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP6 Attend to precision. MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.

area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.OA.B.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.		

Interdisciplinary Connections

2020 Career Readiness, Life Literacies, and Key Skills

9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

Unit 6: Core Unit Content

Vocabulary	*Key Concepts*
❏ Acute angle; ❏ Angle;	❏ Coordinate Systems

- ❏ Area;
- ❏ Axes;
- ❏ Coordinate Plane;
- ❏ Coordinate System;
- ❏ Endpoint;
- ❏ Figure;
- ❏ Graph;
- ❏ Horizontal line;
- ❏ Interval;
- ❏ Length;
- ❏ Line;
- ❏ Line of symmetry;
- ❏ Line segment;
- ❏ Midpoint;
- ❏ Number line;
- ❏ Obtuse;
- ❏ Operation;
- ❏ Ordered pair;
- ❏ Origin;
- ❏ Parallel;
- ❏ Parallelogram;
- ❏ Pattern;
- ❏ Perimeter;
- ❏ Perpendicular;
- ❏ Plane;
- ❏ Point;
- ❏ Polygon;
- ❏ Quadrilateral;
- ❏ Ray;
- ❏ Rectangle;
- ❏ Scale;
- ❏ Square;
- ❏ Symmetry;
- ❏ Term;

- ❏ Patterns in the Coordinate Plane
- ❏ Solve Mathematical Problems in the Coordinate Plane
- ❏ Solve Real-World Problems with the Coordinate Plane

❏ Tick mark; ❏ Trapezoid; ❏ Vertex; ❏ Vertical line; ❏ X-axis; ❏ X-coordinate; ❏ Y-axis; ❏ y-coordinate	

Unit 6: Instructional Materials & Resources	
Eureka Math Squared	• Prodigy • Khan Academy • Math with Pizzazz

Unit 6: Assessments
Formative assessments: • Exit Tickets • Homework • Sprints • Mini Quiz
Summative Assessments: • Quiz • Unit Test
Alternative Assessments: • Small Group • Teacher modifies assignments and activities based on student needs.

- Oral assessments administered in place of written when necessary.
- Accommodation and modification ideas may be found here:
    - Modifications & Accommodations Menu
    - *Assessments other than paper & pencil tests See link for more info: http://education.gmu.edu/assets/docs/forms/mirs/assessment_brochure.pdf*

Unit 6: Accommodations & Modifications

Please utilize the link below for ideas and strategies to use with ELL, Students with IEPS & 504s, At-Risk Students and Gifted & Talented Students. Note possible accommodations or modifications for this unit below.
Modifications & Accommodations Menu