

Kenilworth Public Schools

Curriculum Guide

Content Area: Math

Grade: 5

BOE Approved: 8/13/12

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Submitted by: Michael Klimchak

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Mathematics- Grade 5 Scope and Sequence

Unit 1- Place Value, Multiplication, Division, and Expressions	Unit 2- Decimal Operations	Unit 3- Fraction Operations	Unit 4- Algebra- Patterns and Graphing	Unit 5- Convert Units of Measure	Unit 6- Geometry and Volume	Unit 7- Bridging the Gap
Weeks 1-5	Weeks 6-12	Weeks 13-20	Weeks 21-23	Week 24-26	Weeks 27-29	Weeks 30-38
<p><i>Unit Description:</i> All students will write and interpret numerical expressions, understand the place value system, and perform operations with multi-digit whole numbers. Students will apply and extend previous understandings of multiplication and division to multiply and divide fractions.</p>	<p><i>Unit Description:</i> All students will develop an understanding of operations with decimals to hundredths and developing fluency with whole number and decimal operations. Students will add, subtract, multiply, and divide decimals to hundredths.</p>	<p><i>Unit Description:</i> All students will develop fluency with addition and subtraction of fractions and develop the understanding of multiplication and division of fractions.</p>	<p><i>Unit Description:</i> All students will analyze patterns and relationships, represent and interpret data, and graph points on the coordinate plane to solve real-world and mathematical problems.</p>	<p><i>Unit Description:</i> All students will convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real-world problems.</p>	<p><i>Unit Description:</i> All students will use geometric measurement to understand concepts of volume and relate volume to multiplication and addition. Students will classify two-dimensional figures into categories based on their properties.</p>	<p><i>Unit Description:</i> All students will build on Grade 5 content and be introduced to Grade 6 content.</p>
<i>Unit Targets:</i>	<i>Unit Targets:</i>	<i>Unit Targets:</i>	<i>Unit Targets:</i>	<i>Unit Targets:</i>	<i>Unit Targets:</i>	<i>Unit Targets:</i>

<ul style="list-style-type: none"> • Read and write whole numbers through hundred millions. • Multiply mentally by 10, 100, and 1,000. • Use properties of operations to solve problems. • Write numerical operations. • Use the order of operations to evaluate numerical operations. • Evaluate numerical expressions with parentheses, brackets, and braces. • Multiply multi-digit whole numbers. • Divide by 2-digit divisors. 	<ul style="list-style-type: none"> • Read and write decimals through thousandths. • Add and subtract decimals using place value. • Identify, describe, and create numeric patterns with decimals. • Find patterns in products when multiplying by powers of 10. • Multiply decimals by using place value. • Divide decimals by whole numbers. • Place the decimal point in decimal division. • Write a zero in the dividend to find a quotient. 	<ul style="list-style-type: none"> • Add fractions with unlike denominators. • Find a common denominator or a least common denominator to write equivalent fractions. • Add and subtract mixed numbers with unlike denominators. • Use equivalent fractions to add and subtract fractions. • Multiply fractions by whole numbers and by mixed numbers. • Find the area of a rectangle with fraction length sides. • Divide a whole number by a fraction and divide a fraction by a whole number. 	<ul style="list-style-type: none"> • Make and use line plots with fractions to solve problems. • Graph and name points on a coordinate grid using ordered pairs. • Collect and graph data on a coordinate plane. • Analyze and display data in a line graph. • Graph the relationship between two numerical patterns on a coordinate grid. • Use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the pattern. 	<ul style="list-style-type: none"> • Compare, contrast, and convert customary units of length, capacity, and weight. • Convert measurement units to solve multi-step problems. • Compare, contrast, and convert metric units. • Convert units if time to solve elapsed time problems. 	<ul style="list-style-type: none"> • Classify and draw triangles using their properties. • Identify and classify polygons. • Classify and compare quadrilaterals using their properties. • Identify, classify, and describe three-dimensional figures. • Estimate the volume of a rectangular prism. • Use the formula to find the volume of a rectangular prism. • Find the volume of combined rectangular prisms. 	<ul style="list-style-type: none"> • Compare and order decimals, fractions, and mixed numbers. • Factor numbers using factor trees. • Express decimals as percents and percents as decimals. • Express real world quantities as ratios. • Understand positive and negative numbers. • Write and evaluate expressions. • Find the area of a parallelogram. • Analyze and interpret data in a histogram.
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Mathematics- Grade 5 Unit One

Unit title: Place Value, Multiplication, Division, and Expressions	
Unit summary: All students will write and interpret numerical expressions, understand the place value system, and perform operations with multi-digit whole numbers. Students will apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
Primary Interdisciplinary Connections: Technology, Language Arts	
21st Century Themes: Financial, Economic, Business, and Entrepreneurial Literacy	
Learning Targets	
NJSLS Standards: 5.NBT.1,2,5,6 5.OA 1,2	
Technology Standards: 8.1.5.A.1	
Content Statements:	
1	Order of Operations with grouping symbols
2	Solve order of operation problems
3	Divide four-digit numbers by two-digit numbers
4	Multiply multi-digit whole numbers
Big Idea: Different strategies can help us compute numbers more effectively.	
Unit Essential Questions: <ul style="list-style-type: none"> • How does the order of operations help us to solve problems? • What are the different ways we can multiply and divide numbers? 	Unit Enduring Understandings: <ul style="list-style-type: none"> • Use order of operations to solve real-world problems. • There are multiple algorithms for multiplying and dividing numbers.
Unit Learning Targets <i>Students will...</i> <ul style="list-style-type: none"> • Read and write whole numbers through hundred millions. • Recognize the 10 to 1 relationship among place-value positions. • Multiply mentally by 10, 100, and 1,000. • Use properties of operations to solve problems. • Write and evaluate repeated factors in exponent form. • Write numerical expressions. • Use the order of operations to evaluate numerical operations. • Evaluate numerical expressions with parentheses, brackets, and braces. 	

- Multiply multi-digit whole numbers.
- Divide 3 and 4 digit dividends by 1 digit divisors.
- Divide by 2-digit divisors.

Evidence of Learning

Summative Assessment: Chapter 1 and Chapter 2 Unit Tests

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”

Lesson Plans

<i>Activities</i>	<i>Timeframe</i>
<ul style="list-style-type: none"> • <i>Number Explosion</i>: Orange Activity 1 sheet • <i>A Drive Through History</i>: Literature • <i>Multiplication Relay</i>: Purple Activity Card 11 • <i>Special 5</i>: Orange Activity Card 11 • <i>Divide and Conquer</i>: Orange Activity Card 15 • <i>Niagara Falls Numbers</i>: Literature • <i>What’s Left?</i> Students write and solve a division problem to make a specific remainder • <i>15-Minute March</i>: Blue Activity Card 15 <p>Ongoing activities</p> <ul style="list-style-type: none"> • Multiplication/division timed quizzes • Word problem practice • Interactive notebooks <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is</p>	<p>Weeks 1-5</p>

<p>measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding <ul style="list-style-type: none"> •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud 	
<p><i>Teacher Resources</i></p>	<p><i>Teacher Note</i></p>
<ul style="list-style-type: none"> • Textbook • Textbook resource materials • Grab-and-Go Centers Kit • Think Central resources 	<p>*Activity cards are found in Grab and Go Center.</p> <p>**Interactive notebook pages and modified chapter tests, as well as</p>

- My Personal Math Trainer

****Supplemental Binder:**

- Multiplication chart
- Operation Clue Words
- C.U.B.E.S.
- Place Value charts
- Base 10 Blocks
- 10 x10 chart
- Multiplication facts study sheets
- 3 Ways to Write a Number
- Exponents foldable
- Comparing the Value Flaps
- Properties of multiplication
- Properties of Addition
- PEMDAS
- Order of Operations Activity
- Rules of Divisibility Practice
- Long Division Steps Hamburger
- Interpreting the Remainder charts
- Division of the Day packet
- Division practice games
- Steps for Multiplication
- Kiss and a Hug multiplication

additional teacher resources, can be found in 5th Grade Supplemental Activities binder.

Mathematics- Grade 5 Unit Two

Unit title: Decimal Operations	
Unit summary: All students will develop an understanding of operations with decimals to hundredths and developing fluency with whole number and decimal operations. Students will add, subtract, multiply, and divide decimals to hundredths.	
Primary Interdisciplinary Connections: Technology, Language Arts, Social Studies	
21st Century Themes: Financial, Economic, Business, and Entrepreneurial Literacy	
Learning Targets	
NJSLS Standards: 5.NBT.1,2,3,4,7	
Technology Standards: 8.1.5.A.1	
Content Statements:	
1	Order decimals
2	Identify numeric patterns with decimals
3	Compare decimals
Big Idea: Different strategies can help us add, subtract, multiply, and divide numbers more effectively.	
Unit Essential Questions: <ul style="list-style-type: none"> • How can you use place value in decimal operations? 	Unit Enduring Understandings: <ul style="list-style-type: none"> • Place value can be used in developing fluency with whole number and decimal operations.
Unit Learning Targets <i>Students will...</i> <ul style="list-style-type: none"> • Read and write decimals through thousandths. • Compare and order decimals thousandths using place value as well as round decimals to any place. • Model decimal addition and subtraction using base-10 blocks. • Add and subtract decimals using place value. • Identify, describe, and create numeric patterns with decimals. • Find patterns in products when multiplying by powers of 10. • Multiply decimals by using place value. • Using expanded form and place value to multiply a decimal and a whole number. • Find patterns in quotients when dividing by powers of 10. • Divide decimals by whole numbers. 	

- Place the decimal point in decimal division.
- Write a zero in the dividend to find a quotient.

Evidence of Learning

Summative Assessment: Chapter 3, Chapter 4, and Chapter 5 Unit Tests

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”

Lesson Plans

<i>Activities</i>	<i>Timeframe</i>
<ul style="list-style-type: none"> • <i>Do We Decimal?</i> Orange Activity Card 4 • <i>Dewey and His Decimals:</i> Literature • <i>Decimal Challenge:</i> students name a decimal greater than, less than, or equal to the given decimal • <i>Decimal Display:</i> Purple Activity Card 5 • <i>A Hundredth of a Second:</i> Literature • <i>Halfpipe:</i> Literature • <i>One Form to Another:</i> Blue Activity Card 4 • <i>Doubling Every Day:</i> Literature • <i>Dueling Decimals:</i> Orange Activity Card 13 • <i>Market Multiplication:</i> Blue Activity Card 13 • <i>Powerful Products:</i> Students use four numbers to create two decimal factors with the greatest possible product • <i>D is for...:</i> Orange Activity Card 17 • <i>Centimeter Division:</i> Blue Activity Card 17 • <i>Seeking the Lowest Price:</i> Literature • <i>Grid it:</i> Purple Activity Card 17 <p>Ongoing activities</p> <ul style="list-style-type: none"> • Multiplication/division timed quizzes 	<p>Weeks 6-12</p>

<ul style="list-style-type: none"> • Word problem practice • Interactive notebooks 	
<i>Teacher Resources</i>	<i>Teacher Note</i>
<ul style="list-style-type: none"> • Textbook • Textbook resource materials • Grab-and-Go Centers Kit • Think Central resources • My Personal Math Trainer <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts 	<p>*Activity cards are found in Grab and Go Center</p> <p>**Interactive notebook pages and modified chapter tests, as well as additional teacher resources, can be found in 5th Grade Supplemental Activities binder.</p>

- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Teacher modeling
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding
 - word walls
 - sentence frames
 - think-pair-share
 - cooperative learning groups
 - teacher think-aloud

****Supplemental Binder:**

- Subtracting with Regrouping Rhyme
- Decimal Practice Task Cards

Mathematics- Grade 5 Unit Three

Unit title: Fraction Operations	
Unit summary: All students will develop fluency with addition and subtraction of fractions and develop the understanding of multiplication and division of fractions.	
Primary interdisciplinary connections: Technology and Literature	
21st Century Themes: Financial, Economic, Business, and Entrepreneurial Literacy	
Learning Targets	
NJSLS Standards: 5.NF.1,2,3,4,5,6,7	
Technology Standards: 8.1.5.A.1	
Content Statements:	
1	Addition and subtraction of fractions
2	Real-world problems relating to fractions
3	Multiply and divide fractions
4	Area of a rectangle with fraction side lengths
Big Idea: Different strategies can help us add, subtract, multiply, and divide fractions more efficiently.	
Unit Essential Questions: <ul style="list-style-type: none"> • How do you use fractions to solve real-world problems? 	Unit Enduring Understandings: <ul style="list-style-type: none"> • Fractions can be used in a variety of ways to solve real-world problems.
Unit Learning Targets <i>Students will...</i>	
<ul style="list-style-type: none"> • Add fractions with unlike denominators. • Find a common denominator or at least common denominator to write equivalent fractions. • Add and subtract mixed numbers with unlike denominators. • Use equivalent fractions to add and subtract fractions. • Rename to find the difference of two mixed numbers. • Identify, describe, and create numeric patterns with fractions. • Multiply fractions by whole numbers and by mixed numbers. • Find the area of a rectangle with known fraction length sides. • Interpret a fraction as division and solve whole-number division problems that result in a 	

fraction or mixed number.

- Divide a whole number by a fraction and divide a fraction by a whole number.

Evidence of Learning

Summative Assessment: Chapter 6, Chapter 7, and Chapter 8 Unit Tests

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”- Page 241, Page 289, and Page 337

Lesson Plans

<i>Activities*</i>	<i>Timeframe</i>
<ul style="list-style-type: none">• <i>Plan a Schedule:</i> Orange Activity Card 8• <i>Fossil Hunters:</i> Literature• <i>What’s the Difference:</i> Students use number cards to make two fractions with the least possible difference• <i>Mixed Measures:</i> Blue Activity Card 8• <i>Table Soccer Anyone?</i> Literature• <i>Pattern Block Mix-Up:</i> Purple Activity Card 8• <i>Fractions Add up!:</i> Literature• <i>Fraction Fix Up:</i> Orange Activity Card 6• <i>Fruitful Fractions:</i> Blue Activity Card 6• <i>Cranking Out the Numbers:</i> Literature• <i>Fraction Factors:</i> Students use number cards to multiply fractions with the greatest product <p>Ongoing activities</p> <ul style="list-style-type: none">• Multiplication/division timed quizzes• Word problem practice• Interactive notebooks	Weeks 13-20

<i>Teacher Resources</i>	<i>Teacher Note</i>
<ul style="list-style-type: none"> • Textbook • Textbook resource materials • Grab-and-Go Centers Kit • My Personal Math Trainer • Teacher Supplemental Binder <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills 	<p>*Activity cards are found in Grab and Go Center.</p> <p>**Interactive notebook pages and modified chapter tests, as well as additional teacher resources, can be found in 5th Grade Supplemental Activities binder.</p>

with students who have more advanced English language skills

- Scaffolding
 - word walls
 - sentence frames
 - think-pair-share
 - cooperative learning groups
 - teacher think-aloud

****Supplemental Binder:**

- Fraction Strips chart
- Fraction Parts Interactive notebook pages
- High Roller Activity
- Ways to Compare Fractions
- What is a Fraction Flapbook
- Fraction notecards
- Equivalent Fractions Practice packet
- Fraction Butterfly
- Simplifying Fractions
- Coloring Fractions pages
- Adding & Subtracting Fraction word problems
- Multiplying fractions and Dividing fractions rhymes
- Multiplying Fractions Word problems

Mathematics- Grade 5 Unit Four

Unit title: Algebra-Patterns and Graphing

Unit summary: All students will analyze patterns and relationships, represent and interpret data, and graph points on the coordinate plane to solve real-world and mathematical problems.

Primary Interdisciplinary Connections: Language Arts

21st Century Themes: N/A

Learning Targets

NJSLS Standards: 5.G1-2, 5.OA.3, 5.MD.2

Technology Standards: 8.1.5.A.1

Content Statements:

- | | |
|---|---------------------------|
| 1 | Graphical representations |
| 2 | Input/output table |
| 3 | Coordinate planes |

Big Idea: Graphing table results can help us understand graphical representations on a coordinate plane.

Unit Essential Questions:

- How can you use a graph to display and analyze real-world data?

Unit Enduring Understandings:

- Different graphs can be used to organize and display real-world data.

Unit Learning Targets

Students will...

- Make and use line plots with fractions to solve problems.
- Graph and name points on a coordinate grid using ordered pairs.
- Collect and graph data on a coordinate plane.
- Analyze and display data in a line graph.
- Graph the relationship between two numerical patterns on a coordinate grid.
- Use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the pattern.

Evidence of Learning

Summative Assessment: Chapter 9 Unit Test

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”- Page 367

Lesson Plans

<i>Activities*</i>	<i>Timeframe</i>
<ul style="list-style-type: none">• <i>Figure out the Points:</i> Blue Activity Card 19• <i>Is this a Career for you?</i> Literature• <i>It’s a Toss Up:</i> students toss beanbags and express the results as ordered pairs on the coordinate plane• <i>Let’s Shake:</i> Orange Activity Card 19• <i>Park Visitors:</i> Literature• <i>Graphing Practice:</i> Literature <p>Ongoing activities</p> <ul style="list-style-type: none">• Multiplication/division timed quizzes• Word problem practice• Interactive notebooks <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none">• Use of visual and multisensory formats• Use of assisted technology	Weeks 21-23

<ul style="list-style-type: none"> • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding <ul style="list-style-type: none"> •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud 	
<i>Teacher Resources</i>	<i>Teacher Note</i>
<ul style="list-style-type: none"> • Textbook • Textbook resource materials • Grab-and-Go Centers Kit • Think Central resources • My Personal Math Trainer <p>**Supplemental Binder:</p> <ul style="list-style-type: none"> • Rules for Finding Fraction Patterns • Pick and Practice 	<p>*Activity cards are found in Grab and Go Center.</p> <p>**Interactive notebook pages and modified chapter tests, as well as additional teacher resources, can be found in 5th Grade Supplemental Activities binder.</p>

Mathematics- Grade 5 Unit Five

Unit title: Convert Units of Measure

Unit summary: All students will convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real-world problems.

Primary interdisciplinary connections: Technology and Language Arts

21st Century Themes: Global Awareness

Learning Targets

NJSLS Standards: MD.1

Technology Standards: 8.1.5.A.1

Content Statements:

1 | Customary units

2 | Measurement units

Big Idea: The conversion of measurements is a vital 21st century tool to get along in a global society.

Unit Essential Questions:

- How can customary and metric units be used in our daily lives?

Unit Enduring Understandings:

- Customary and metric units are used in high frequency in situations involving measurement.

Unit Learning Targets

Students will...

- Compare, contrast, and convert customary units of length.
- Compare, contrast, and convert customary units of capacity.
- Compare, contrast, and convert customary units of weight.
- Convert measurement units to solve multi-step problems.
- Compare, contrast, and convert metric units.
- Convert units if time to solve elapsed time problems.

Evidence of Learning

Summative Assessment: Chapter 10 Unit Test

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”- Page 403

Lesson Plans	
<i>Activities*</i>	<i>Timeframe</i>
<ul style="list-style-type: none"> • <i>Size it up Metric</i>: Orange Activity Card 2 • <i>A Math Mix-up</i>: Literature • <i>2 steps forward, 1 step back</i>: Students convert customary and metric units to move along the game path • <i>Conversion Challenge</i>: Purple Activity Card 2 • <i>Measurement MATHO</i>: Blue Activity Card 2 • <i>A Day in Dallas</i>: Literature <p>Ongoing activities</p> <ul style="list-style-type: none"> • Multiplication/division timed quizzes • Word problem practice • Interactive notebooks <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products 	<p>Weeks 24-26</p>

<ul style="list-style-type: none"> • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills <p>English language skills</p> <ul style="list-style-type: none"> • Scaffolding <ul style="list-style-type: none"> •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud 	
<i>Teacher Resources</i>	<i>Teacher Note</i>
<ul style="list-style-type: none"> • Textbook • Textbook resource materials • Grab-and-Go Centers Kit • Think Central resources • My Personal Math Trainer <p>**Supplemental Binder:</p> <ul style="list-style-type: none"> • Custom Capacity Big “G” chart • Customary Measurement Basics • Metric Conversion • Mr. Gallons Parts 	<p>*Activity cards are found in Grab and Go Center.</p> <p>**Interactive notebook pages and modified chapter tests, as well as additional teacher resources, can be found in 5th Grade Supplemental Activities binder.</p>

Mathematics- Grade 5 Unit Six

Unit title: Geometry and Volume	
Unit summary: All students will use geometric measurement to understand concepts of volume and relate volume to multiplication and addition. Students will classify two-dimensional figures into categories based on their properties.	
Primary interdisciplinary connections: Technology and Language Arts	
21st Century Themes: N/A	
Learning Targets	
NJSLS Standards: 5.MD.3, 4, 5G. 3, 4	
Technology Standards: 8.1.5.A.1	
Content Statements:	
1	Three-dimensional figures
2	Volume and surface area of rectangular prisms
3	Two-dimensional figures- Classify two-dimensional figures in a hierarchy based on properties.
Big Idea: Classifying figures can help us understand shapes in the real world.	
Unit Essential Questions: <ul style="list-style-type: none"> • How can spatial relationships be described in geometric language? • How can geometric shapes be used to solve problems? 	Unit Enduring Understandings: <ul style="list-style-type: none"> • Geometric properties can be used to construct geometric features. • Everyday objects can be measured and used to solve real-world problems.
Unit Learning Targets <i>Students will...</i>	
<ul style="list-style-type: none"> • Classify and draw triangles using their properties. • Identify and classify polygons. • Classify and compare quadrilaterals using their properties. • Identify, classify, and describe three-dimensional figures. • Estimate the volume of a rectangular prism. • Find the volume of a rectangular prism. • Use the formula to find the volume of a rectangular prism. • Find the volume of combined rectangular prisms. 	

Evidence of Learning

Summative Assessment: Chapter 11 Unit Test

Formative Assessments:

- Exit slips
- Quizzes
- Notebook checks
- Teacher observation
- Class participation
- Problem of the day
- “Show what you know”- Page 439

Lesson Plans

<i>Activities*</i>	<i>Timeframe</i>
<ul style="list-style-type: none"> • <i>Geometry MATHO</i>- Blue Activity Card 16 • <i>Beautiful Geometry</i>- Literature • <i>Model Makers</i>- Students identify the attributes of and build models of two-dimensional figures • <i>Protractor practice</i>: Blue Activity Card 20 • <i>Picture This</i>: Purple Activity Card 16 • <i>A Roller Coaster of Angles</i>: Literature • <i>3-D Construction</i>: Blue Activity Card 14 • <i>City of the Future</i>: Literature • <i>What’s in the box</i>: Blue Activity Card 12 • <i>Inner Space</i>: Orange Activity Card 12 • <i>Triple Play</i>: Students practice finding the volume of rectangular prisms • <i>Vary the Volume</i>: Orange Activity Card 14 <p>Ongoing activities</p> <ul style="list-style-type: none"> • Multiplication/division timed quizzes • Word problem practice • Interactive notebooks <p>Students with Disabilities, English Language Learners, and Gifted & Talented Students:</p> <p>Differentiating instruction is a flexible process that</p>	<p>5 weeks</p> <p>Weeks 27-29</p>

<p>includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students.</p> <p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments <p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios <p>Examples of Strategies and Practices that Support English Language Learners:</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding <ul style="list-style-type: none"> • word walls • sentence frames • think-pair-share • cooperative learning groups • teacher think-aloud 	
<i>Teacher Resources</i>	<i>Teacher Note</i>
<ul style="list-style-type: none"> • Textbook 	<p>*Activity cards are found in Grab and Go Center.</p>

- Textbook resource materials
- Grab-and-Go Centers Kit
- Think Central resources
- My Personal Math Trainer

****Supplemental Binder:**

- Quadrilateral chart
- Polygons
- Formula for area and volume

**Interactive notebook pages and modified chapter tests, as well as additional teacher resources, can be found in 5th Grade Supplemental Activities binder.