

Red Bank Charter School

Grade 4 Mathematics Curriculum

Recommended Pacing Guide	
Unit 1: Operations and Algebraic Thinking	35 Days
Unit 2: Number and Operations in Base Ten	45 Days
Unit 3: Number and Operations - Fractions	65 Days
Unit 4: Measurement and Data	20 Days
Unit 5: Geometry	15 Days

Suggested Accommodations For All Units
<p>English Language Learners:</p> <ul style="list-style-type: none">● Pair ELL student with student who speaks English and understands/ able to communicate with student's native language● Simplify content● Google Translator● Multi - language word wall● Provide extended time● Speak clearly and slowly, avoid slang and idiomatic expressions
<p>Special Education/504 Plans/Students with Disabilities:</p> <ul style="list-style-type: none">● Follow specific students accommodations and modifications as listed in individual student IEP or 504 plan
<p>Gifted and Talented:</p> <ul style="list-style-type: none">● Provide appropriate challenges for a wide ranging skills and development.● Participate in inquiry and project-based learning units of study.● Provide options, alternatives and choices to differentiate and broaden the curriculum
<p>Students at Risk of Failure:</p> <ul style="list-style-type: none">● Students Motivation<ul style="list-style-type: none">○ Interest○ Build confidence○ Independence○ Enjoyment

Economically Disadvantaged:

- Build a safe and nurturing atmosphere
- Providing needed academic resources (paper, pencils, computer time,)
- Be flexible with assignments

Culturally Diverse:

- Involve families in student learning
- Provide immediate praise and feedback
- Respect cultural traditions
- Provided students with necessary academic resources and materials
- Provide visuals

Unit 1: Operations and Algebraic Thinking**Duration: 35 Days****Standards/Learning Targets**

New Jersey Student Learning Standards: Use the four operations with whole numbers to solve problems.

NJSLS.MATH.CONTENT.4.OA.A.1

- Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.
- Represent verbal statements of multiplicative comparisons as multiplication equations.

NJSLS.MATH.CONTENT.4.OA.A.2

- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

NJSLS.MATH.CONTENT.4.OA.A.3

- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity.
- Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Gain familiarity with factors and multiples.

NJSLS.MATH.CONTENT.4.OA.B.4

- Find all factor pairs for a whole number in the range 1-100.
- Recognize that a whole number is a multiple of each of its factors.
- Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number.
- Determine whether a given whole number in the range 1-100 is prime or composite. Generate and analyze patterns.

NJSLS.MATH.CONTENT.4.OA.C.5

- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Primary Interdisciplinary Connections:**Literacy Connection**

- NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats,

including visually and quantitatively, as well as in words

- NJSLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content
- NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others
- NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.
- L.4.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening

Science Connection

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Technology Standards:

- 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- 8.1.5.A.3 Use a graphic organizer to organize information about problems or issues.
- 8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains 1 Adopted 10.1.14 the analysis of the data.
- 8.1.P.C.1 Collaborate with peers by participating in interactive digital games or activities.

21st Century Themes/Career Readiness:

Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Personal Financial Literacy

- 9.1.4.A.3 Explain how income affects spending and take-home pay.
- 9.1.4.B.2 Identify age-appropriate financial goals.
- 9.1.4.B.3 Explain what a budget is and why it is important.

Career Awareness Exploration and Preparation

- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Evidence of Student Learning

Formative Tasks:

- Teacher Observation
- Teacher Checklist
- Verbal question & answer
- Self-evaluation of performance and progress

Alternative Assessments:

Projects:

- Place Value Project
- Million Dollar Project
- Movie Theater Design Project
- Animal Measurement Project

Summative Assessments:

- Student participation
- Rubric score
- Performance Test

Benchmark Assessments:

- Baseline SGO
- Mid-year SGO
- End of year SGO

Knowledge & Skills

Enduring Understandings:

- Change is fundamental to understanding functions.
- Numbers or objects that repeat in predictable ways can be described or generalized.
- An operation can be “undone” by its inverse.
- Rules of arithmetic and algebra can be used together with notions of equivalence to transform equations and inequalities so solutions can be found.

Essential Questions:

- How can change be described mathematically?
- How are patterns of change related to the behavior of functions?
- How do mathematical models/representations shape our understanding of mathematics?

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Vocabulary Cards
- Activities
- Blackline Masters
- Math Musicals
- Virtual Manipulatives
- Interactive Explorations
- Digit Examples
- Skills Trainer
- Flashcards
- STEAM videos
- Game Library
- Multi-language glossary

Varied Levels of Text/Resources:

- Big Ideas Math Modeling Real Life - Teacher Resources
- <https://www.bigideasmath.com/BIM/login>
- Big Ideas Math Manipulative Kit
- Student Edition
- Teaching Edition
- Family Letters
- Warm-Ups
- Extra Practice
- Reteach
- Enrichment and Extension
- Prerequisite Skills Practice

- Graphic organizers Math
- Tool Paper
- Dry Erase Boards Smart
- Notebook
- Khan Academy
- IXL

- Pre and Post Course Assessments
- Course Benchmark Assessments
- Chapter Assessments

Unit 2: Number and Operations in Base Ten

Duration: 45 Days

Standards/Learning Targets

New Jersey Student Learning Focus Standards: Generalize place value understanding for multi-digit whole numbers.

NJSLS.MATH.CONTENT.4.NBT.A.1

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.

NJSLS.MATH.CONTENT.4.NBT.A.2

- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.
- Compare two multi-digit numbers based on meanings of the digits in each place, using $<$, $=$, and $>$ symbols to record the results of comparisons.

NJSLS.MATH.CONTENT.4.NBT.A.3

- Use place value understanding to round multi-digit whole numbers to any place.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

NJSLS.MATH.CONTENT.4.NBT.B.4

- Fluently add and subtract multi-digit whole numbers using the standard algorithm.

NJSLS.MATH.CONTENT.4.NBT.B.5

- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations.
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

NJSLS.MATH.CONTENT.4.NBT.B.6

- Find whole-number quotients and remainders with up to four-digit dividends and one-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.

Primary Interdisciplinary Connections:

Literacy Connection

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- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Technology Standards:

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- 8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains 1 Adopted 10.1.14 the analysis of the data.
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- CRP2. Apply appropriate academic and technical skills.
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Personal Financial Literacy

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- 9.1.4.B.2 Identify age-appropriate financial goals.
- 9.1.4.B.3 Explain what a budget is and why it is important.

Career Awareness Exploration and Preparation

- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Evidence of Student Learning

<p>Formative Tasks:</p> <ul style="list-style-type: none"> ● Teacher Observation ● Teacher Checklist ● Verbal question & answer ● Self-evaluation of performance and progress 	<p>Alternative Assessments: End of unit project:</p> <p>Projects</p> <ul style="list-style-type: none"> ● Place Value Project ● Million Dollar Project ● Movie Theater Design Project ● Animal Measurement Project
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<p>Summative Assessments:</p> <ul style="list-style-type: none"> ● Student participation ● Rubric score ● Performance Test 	<p>Benchmark Assessments:</p> <ul style="list-style-type: none"> ● Baseline SGO ● Mid-year SGO ● End of year SGO
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Knowledge & Skills

<p>Enduring Understandings:</p> <ul style="list-style-type: none"> ● Numbers can be represented in multiple ways. ● The same operations can be applied in problem situations that seem quite different from another. ● Being able to compute fluently means making smart choices about which tools to use and when to use them. ● Knowing the reasonableness of an answer comes from using good number sense and estimation strategies. 	<p>Essential Questions:</p> <ul style="list-style-type: none"> ● What makes an estimate reasonable? ● What makes an answer exact? ● What makes a strategy both effective and efficient? ● What makes a solution optimal?
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Core Instructional & Supplemental Materials

<p>Suggested Activities/Resources:</p> <ul style="list-style-type: none"> ● Vocabulary Cards ● Activities ● Blackline Masters ● Math Musicals ● Virtual Manipulatives ● Interactive Explorations ● Digit Examples ● Skills Trainer ● Flashcards ● STEAM videos ● Game Library 	<p>Varied Levels of Text/Resources:</p> <ul style="list-style-type: none"> ● Big Ideas Math Modeling Real Life - Teacher Resources ● https://www.bigideasmath.com/BIM/login ● Big Ideas Math Manipulative Kit ● Student Edition ● Teaching Edition ● Family Letters ● Warm-Ups ● Extra Practice ● Reteach ● Enrichment and Extension
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- Multi-language glossary
- Graphic organizers Math
- Tool Paper
- Dry Erase Boards Smart
- Khan Academy
- IXL

- Prerequisite Skills Practice
- Pre and Post Course Assessments
- Course Benchmark Assessments
- Chapter Assessments

Unit 3: Number and Operations - Fractions**Duration: 65 Days****Standards/Learning Targets****New Jersey Student Learning Focus Standards: Extend understanding of fraction equivalence and ordering.****NJSLS.MATH.CONTENT.4.NF.A.1**

- Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size.
- Use this principle to recognize and generate equivalent fractions.

NJSLS.MATH.CONTENT.4.NF.A.2

- Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$.
- Recognize that comparisons are valid only when the two fractions refer to the same whole.
- Record the results of comparisons with symbols $<$, $=$, or $>$ and justify the conclusions, e.g., by using a visual fraction model.
- Build fractions from unit fractions.

NJSLS.MATH.CONTENT.4.NF.B.3

- Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

NJSLS.MATH.CONTENT.4.NF.B.3.A

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

NJSLS.MATH.CONTENT.4.NF.B.3.B

- Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation.
- Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.

NJSLS.MATH.CONTENT.4.NF.B.3.C

- Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

NJSLS.MATH.CONTENT.4.NF.B.3.D

- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

NJSLS.MATH.CONTENT.4.NF.B.4

- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

NJSLS.MATH.CONTENT.4.NF.B.4.A

- Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.

NJSLS.MATH.CONTENT.4.NF.B.4.B

- Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)

NJSLS.MATH.CONTENT.4.NF.B.4.C

- Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?
- Understand decimal notation for fractions, and compare decimal fractions.

NJSLS.MATH.CONTENT.4.NF.C.5

- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.

NJSLS.MATH.CONTENT.4.NF.C.6

- Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

NJSLS.MATH.CONTENT.4.NF.C.7

- Compare two decimals to hundredths by reasoning about their size.
- Recognize that comparisons are valid only when the two decimals refer to the same whole.
- Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Primary Interdisciplinary Connections:

Literacy Connection

- NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats,

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Science Connection

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Projects

Place Value Project
Million Dollar Project
Movie Theater Design Project
Animal Measurement Project

Technology Standards:

- 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems
- 8.1.5.A.3 Use a graphic organizer to organize information about problems or issues.
- 8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains 1 Adopted 10.1.14 the analysis of the data.
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21st Century Themes/Career Readiness:

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Personal Financial Literacy

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- 9.1.4.B.2 Identify age-appropriate financial goals.
- 9.1.4.B.3 Explain what a budget is and why it is important.

Career Awareness Exploration and Preparation

- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Evidence of Student Learning

Formative Tasks:

- Teacher Observation
- Teacher Checklist
- Verbal question & answer
- Self-evaluation of performance and progress

Alternative Assessments:

End of unit project:

Projects

- Place Value Project
- Million Dollar Project
- Movie Theater Design Project
- Animal Measurement Project

Summative Assessments:

- Student participation
- Rubric score
- Performance Test

Benchmark Assessments:

- Baseline SGO
- Mid-year SGO
- End of year SGO

Knowledge & Skills

Enduring Understandings:

- Change is fundamental to understanding functions.
- Numbers or objects that repeat in predictable ways can be described or generalized.
- An operation can be “undone” by its inverse.
- Rules of arithmetic and algebra can be used together with notions of equivalence to transform equations and inequalities so solutions can be found.

Essential Questions:

- How can change be described mathematically?
- How are patterns of change related to the behavior of functions?
- How do mathematical models/representations shape our understanding of mathematics?

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Vocabulary Cards
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- Math Musicals
- Virtual Manipulatives
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Varied Levels of Text/Resources:

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- Student Edition
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<ul style="list-style-type: none"> ● Skills Trainer ● Flashcards ● STEAM videos ● Game Library ● Multi-language glossary ● Graphic organizers Math ● Tool Paper ● Dry Erase Boards Smart ● Notebook ● Khan Academy ● IXL 	<ul style="list-style-type: none"> ● Warm-Ups ● Extra Practice ● Reteach ● Enrichment and Extension ● Prerequisite Skills Practice ● Pre and Post Course Assessments ● Course Benchmark Assessments ● Chapter Assessments
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Unit 4: Measurement and Data	Duration: 20 Days
Standards/Learning Targets	
<p>New Jersey Student Learning Focus Standards: Solve problems involving measurement and conversion of measurements.</p> <p>NJSLS.MATH.CONTENT.4.MD.A.1</p> <ul style="list-style-type: none"> ● Know relative sizes of measurement units within one system of units including km, m, cm; mm; kg, g; lb, oz.; l, ml; hr, min, sec. ● Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. ● Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. ● Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36),... <p>NJSLS.MATH.CONTENT.4.MD.A.2</p> <ul style="list-style-type: none"> ● Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or 	

decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.

- Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

NJSLS.MATH.CONTENT.4.MD.A.3

- Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.
- Represent and interpret data.

NJSLS.MATH.CONTENT.4.MD.B.4

- Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$).
- Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometric measurement: understand concepts of angle and measure angles.

NJSLS.MATH.CONTENT.4.MD.C.5

- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

NJSLS.MATH.CONTENT.4.MD.C.5.A

- An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle.
- An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle” and can be used to measure angles.

NJSLS.MATH.CONTENT.4.MD.C.5.B

- An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

NJSLS.MATH.CONTENT.4.MD.C.6

- Measure angles in whole-number degrees using a protractor.
- Sketch angles of specified measure.

NJSLS.MATH.CONTENT.4.MD.C.7

- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts.
- Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

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Knowledge & Skills

Enduring Understandings:

- Linear measure, area, and volume are fundamentally different but may be related to one another in ways that permit calculation of one given the other.

Essential Questions:

- How are measurement and counting related?
- How does what we measure affect how we measure?
- How can space be defined through numbers/measurement?

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Activities
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- Math Musicals
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- Interactive Explorations
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- Notebook
- Khan Academy
- IXL

- Course Benchmark Assessments
- Chapter Assessments
- Vocabulary Cards

Unit 5: Geometry**Duration: 15 Days****Standards/Learning Targets****New Jersey Student Learning Focus Standards:**

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

NJSLS.MATH.CONTENT.4.G.A.1

- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.
- Identify these in two-dimensional figures.

NJSLS.MATH.CONTENT.4.G.A.2

- Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size.
- Recognize right triangles as a category, and identify right triangles.

NJSLS.MATH.CONTENT.4.G.A.3

- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts.
- Identify line-symmetric figures and draw lines of symmetry.

Primary Interdisciplinary Connections:**Literacy Connection**

- NJLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words
- NJLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content
- NJLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others
- NJLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.
- L.4.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening

Science Connection

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Technology Standards:

- 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems
- 8.1.5.A.3 Use a graphic organizer to organize information about problems or issues.
- 8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains 1 Adopted 10.1.14 the analysis of the data.
- 8.1.P.C.1 Collaborate with peers by participating in interactive digital games or activities

21st Century Themes/Career Readiness:**Career Ready Practices**

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Personal Financial Literacy

- 9.1.4.A.3 Explain how income affects spending and take-home pay.
- 9.1.4.B.2 Identify age-appropriate financial goals.
- 9.1.4.B.3 Explain what a budget is and why it is important.

Career Awareness Exploration and Preparation

- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Evidence of Student Learning**Formative Tasks:**

- Teacher Observation
- Teacher Checklist
- Verbal question & answer
- Self-evaluation of performance and progress

Alternative Assessments:

End of unit project:

Projects

- Place Value Project
- Million Dollar Project
- Movie Theater Design Project
- Animal Measurement Project

Summative Assessments:

- Student participation
- Rubric score
- Performance Test

Benchmark Assessments:

- Baseline SGO
- Mid-year SGO
- End of year SGO

Knowledge & Skills**Enduring Understandings:****Essential Questions:**

- Two- and three-dimensional objects can be described, classified, and analyzed by their attributes.
- An object in a plane or in space can be oriented in an infinite number of ways while maintaining its size or shape.
- An object's location on a plane or in space can be described quantitatively.
- Linear measure, area, and volume are fundamentally different but may be related to one another in ways that permit calculation of one given the other.

- Why do we compare contrast and classify objects?
- How do decomposing and recomposing shapes help us build our understanding of mathematics?
- How can transformations be described mathematically?

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Vocabulary Cards
- Activities Blackline
- Masters Math
- Musicals
- Virtual Manipulatives
- Interactive Explorations
- Digit Examples
- Skills Trainer
- Flashcards
- STEAM videos
- Game Library
- Multi-language glossary
- Graphic organizers Math
- Tool Paper
- Dry Erase Boards Smart
- Notebook
- Khan Academy
- IXL

Varied Levels of Text/Resources:

- Big Ideas Math Modeling Real Life - Teacher Resources
- <https://www.bigideasmath.com/BIM/login>
- Big Ideas Math Manipulative Kit
- Student Edition
- Teaching Edition
- Family Letters
- Warm-Ups
- Extra Practice
- Reteach
- Enrichment and Extension
- Prerequisite Skills Practice
- Pre and Post Course Assessments
- Course Benchmark Assessments
- Chapter Assessments