

Moonachie School District Mathematics Curriculum: Grade 4

Born On & Board Approved: August 27, 2024

Re-Adoption: August 26, 2025

The following maps outline the New Jersey Student Learning Standards for grade four mathematics determined by the State Standards Initiative. Below is a list of assessment tools that are recommended for tracking student progress in these areas. In addition, resources that can be used in conjunction with instruction of these standards are provided but not limited to the list below.

Assessment:

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| Formative Assessment | Class-Work Review |
| Open-Ended Problems | Project-Based Assessment |
| Self-Assessment | Timed Drills |
| Teacher Observation | End of Year Assessment |
| Benchmark Assessment | Math Software (ex. Study Island) |
| Homework Review | Group & Cooperative Work |
| Summative Assessment | |

Resources:

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| Counters (variety) | Tangrams | Protractors |
| Flashcards | Ten Frame | Geometric Shapes |
| Math Word Wall | Blocks | Geo-Board |
| Connecting Cubes | Calendar | Textbooks |
| Number Line | 100 Chart | Attribute Blocks |
| Work Mats | Math Songs/Poems | Craft Sticks |
| Computer Software | Calculators | Wiki-Sticks |
| Interactive White Board | Money/Coins | Pattern Blocks |
| Flannel Board | Measurement Tools | Three Dimensional Shapes |
| Center Games | Rulers | Fraction Tiles |
| Concrete Objects | Bar Models | Math/Pocket Charts |
| Mini White Boards | Base Ten Blocks | |
| Manipulatives | Math Journals | |

Websites:

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| www.ixl.com | www.Envision.2020.com | www.xtramath.com |
| www.aplusmath.com | www.tenmarks.com | www.superteacherworksheets.com |
| www.brainpop.com | www.commoncoresheets.com | www.mrnussbaum.com |
| www.brainpopjr.com | www.fun4thebrain.com | www.learnzillion.com |

www.funbrain.com

www.math-play.com

www.k6.thinkcentral.com

www.mathplayground.com

www.smartexchange.com

www.interactivesites.weebly.com/math.html

www.sheppardssoftware.com

<http://www.k-5mathteachingresources.com>

www.songsforteaching.com

References:

<http://www.state.nj.us/education/aps/cccs/math/>

NJ Technology Standards: <http://www.state.nj.us/education/cccs/2014/tech/8.pdf>

NJ Career Ready Practices: <http://www.state.nj.us/education/aps/cccs/career/>

| <u>Standards for Mathematical Practice</u> |
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| MP. 1 - Make Sense of problems and persevere in solving them. |
| MP. 2 - Reason Abstractly and Quantitatively |
| MP. 3 - Construct Viable Arguments and Critique the Reasoning of Others |
| MP. 4 - Model with Mathematics |
| MP. 5 - Use Appropriate Tools Strategically |
| MP. 6 - Attend to Precision |
| MP. 7 - Look for and make use of Structure |
| MP. 8 - Look for and Express Regularity in Repeated Reasoning |

MATHEMATICS: GRADE 4
DOMAIN: OPERATIONS AND ALGEBRAIC THINKING

Topic and Length of Time: Topics 6 - 7 - 20 days

| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
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| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk Whiteboard Work | Topic Review Topic Test Quick Check Fact Assessment Performance Task | Manipulative Based Task Open Ended Project Choice Board |

Cluster Heading

4.OA.A Use the four operations with whole numbers to solve problems.

Performance Indicators

- 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.
- 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.
- 4.OA.A.3 Solve multi-step 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. 🌱

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Interpret comparisons as multiplication or addition equations. - Use multiplication and division to compare two quantities. - Model and solve multi-step problems, using equations to represent problems. - Interpret remainders. | Sum Difference Product Quotient Array Factor Remainder Multiplicative comparison Additive comparison Variable | <ul style="list-style-type: none"> - Guided practice - Class discussion - Independent practice - Centers/Task Cards - Bar models - Real-world application in word problems - Write equations based on given scenario |

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| | Estimate Round Compatible numbers Equation | - Solve multi-step word problems related to energy, fuel, natural resources and human impact on climate |
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| Cluster Heading |
| 4.OA.B: Gain familiarity with factors and multiples. |
| Performance Indicators |
| 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. |

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Use arrays and multiplication to find all the factor pairs of a number. - Use factors to determine whether a number is prime or composite. - Use multiplication to find multiples of a given number. | Factor Multiple Factor pairs Divisibility Prime Composite | <ul style="list-style-type: none"> - Note taking - Guided practice - Class discussion - Independent practice - Centers/Task Cards - Real-world application in word problems - Create factor rainbows - Scoot task cards - Buzz/Sparkle group/whole class game to review prime vs composite |

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| Cluster Heading |
| 4.OA.C: Generate and analyze patterns. |
| Performance Indicators |
| 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. |

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Create or extend a number or shape sequence based on a rule. - Identify features of a pattern. | Rule Sequence Pattern - growing and repeating Increase and decrease | <ul style="list-style-type: none"> - Note taking - Guided practice - Class discussion - Independent practice - Centers/Task Cards - Students create their own patterns and others extend them |

| MATHEMATICS: GRADE 4 DOMAIN: NUMBER AND OPERATION IN BASE TEN | | | |
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| Topic and Length of Time: Topics 1 - 5 - 65 days | | | |
| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk Whiteboard Work | Topic Review Topic Test Quick Check Fact Assessment Performance Task | Manipulative Based Task Open Ended Project Choice Board |

| Cluster Heading |
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| 4.NBT.A : Generalize place value understanding for multi-digit whole numbers. |
| Performance Indicators |
| 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. |
| 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. |
| 4.NBT.A.3 Use place value understanding to round multi-digit whole numbers to any place. |

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| <p>Students will be able to:</p> <ul style="list-style-type: none"> - Read and write numbers through one million in expanded form, numerals, and number names. - Recognize the relationship between adjacent digits in a multi-digit number. - Use place value to compare multi-digit numbers. - Use place value to round multi-digit numbers. | <p>Place value Value Standard form Expanded form Number name/word form Rounding Whole number Period Thousand, Million Comparison using $>$, $<$, $=$</p> | <ul style="list-style-type: none"> - Note taking - Guided practice - Class discussion - Independent practice - Centers/Task Cards - Comparison Top-It Card Game - Roll and round/roll and write activities |
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| Cluster Heading | |
| 4.NBT.B : Use place value understanding and properties of operations to perform multi-digit arithmetic. | |
| Performance Indicators | |
| 4.NBT.B.4 | With accuracy and efficiency, add and subtract multi-digit whole numbers using the standard algorithm. |
| 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. |
| 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. |

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| <p>Students will be able to:</p> <ul style="list-style-type: none"> - Add and subtract multi-digit numbers efficiently and accurately using the standard algorithm. - Use place value based strategies to multiply a whole number by one digit and two two-digit numbers. | <p>Add Subtract Multiply Divide Sum Difference Product Quotient</p> | <ul style="list-style-type: none"> - Tic-Tac-Toe with four operations - Create area models to multiply and divide - Use cards/dice to create numbers and perform the four operations - Bingo review - Note taking - Guided practice |

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| <ul style="list-style-type: none"> - Use place value based strategies to divide up to four digits by 1-digit numbers. - Illustrate multiplication and division using arrays and/or area models. - Explain place value strategies used to multiply and divide. | Divisor Dividend Remainder Array Estimate Strategy Area model Partial product Partial quotient | <ul style="list-style-type: none"> - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |
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| MATHEMATICS: GRADE 4 | | | |
| DOMAIN: NUMBER AND OPERATIONS - FRACTIONS | | | |
| Topic and Length of Time: Topics 8 - 10 - 37 days | | | |
| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk Whiteboard Work | Topic Review Topic Test Quick Check Fact Assessment Performance Task | Manipulative Based Task Open Ended Project Choice Board |

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| Cluster Heading |
| 4.NF.A: Extend understanding of fractions equivalence and ordering. |
| Performance Indicators |
| <p>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.</p> <p>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.</p> |

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Use fraction area models and number lines to recognize and generate equivalent fractions. - Use multiplication and division to generate equivalent fractions. - Compare fractions using benchmarks, visual models, and/or common denominators or numerators. | Fraction Proper fraction Numerator Denominator Equivalent fraction Benchmark fraction Common denominators Common numerators Common multiple Comparison using $>$, $<$, $=$ Order Fraction model | <ul style="list-style-type: none"> - Clothesline number lines - Fraction "Top It" - "I Have, Who Has?" activities for equivalent fractions - Bingo review - Note taking - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

| Cluster Heading 4.NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. | |
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| Performance Indicators | |
| 4.NF.B.3 | Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. <ul style="list-style-type: none"> - 4.NF.B.3.a: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. - 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: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$ - 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. - 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. |
| 4.NF.B.4 | Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. <ul style="list-style-type: none"> - 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 $5/4 = 5 \times (1/4)$ |

- 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, $n \times (a/b) = (n \times a)/b$.
- 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?

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Decompose a fraction into a sum of fractions in more than one way. - Justify decomposition of fractions. - Add and subtract fractions and mixed numbers with like denominators. - Solve addition, subtraction, and multiplication fraction word problems. - Multiply a fraction by a whole number using visual fraction models and understanding of fractions. - Recognize a fraction as a multiple of a unit fraction. | Fraction Mixed number Compose Decompose Numerator Denominator Like denominators Equivalent fraction Benchmark fraction Common denominators Common numerators Common multiple Comparison using $>$, $<$, $=$ Order Fraction model | <ul style="list-style-type: none"> - Clothesline number lines - Bingo review - Match fractions with their equivalent decomposition - Card/dice games: create fractions to add, subtract, multiply and decompose - Multiply ingredients in a recipe - Note taking - Check mark method to change fraction greater than 1 - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

Cluster Heading

4.NF.C: Understand decimal notation for fractions and compare decimal fractions.

Performance Indicators

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 $\frac{3}{10}$ as $\frac{30}{100}$ and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$. (Clarification: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.)

4.NF.C.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

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.

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
|---|--|--|
| Students will be able to: <ul style="list-style-type: none"> - Relate fractions and decimals with denominators of 10 and 100. - Locate and describe decimals on number lines. - Compare decimals by reasoning about their size and justify the comparison. - Add fractions with denominators of 10 and 100. | Decimal Decimal point Whole number Tenth Hundredth Numerator Denominator Place value Number line Compare using $>$, $<$, $=$ Equivalent fraction Common denominator | <ul style="list-style-type: none"> - Clothesline number lines - Bingo review - Card/dice games - Comparison Top-It card game - Note taking - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

MATHEMATICS: GRADE 4

DOMAIN: MEASUREMENT

Topic and Length of Time: Topics 13 - 14 - 20 days

| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
|----------------------------------|---|--|---|
| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk | Topic Review Topic Test Quick Check Fact Assessment | Manipulative Based Task Open Ended Project Choice Board |

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| | Whiteboard Work | Performance Task | |
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Cluster Heading

4.M.A: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Performance Indicators

4.M.A.1 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), ...

4.M.A.2 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.

4.M.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. 🌱

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
|--|---|---|
| Students will be able to: <ul style="list-style-type: none"> - Recognize the relative size of customary and metric units of measurement and convert from a larger unit to a small unit. - Solve word problems involving units of measurement: time, distance, mass, volume, and money. - Represent measurement quantities using diagrams. - Find the unknown length or width of a rectangle using the known area or perimeter. | Measurement Area Perimeter Customary units <ul style="list-style-type: none"> - Capacity (fluid ounce, cup, pint, quart, gallon, - Weight (ounce, pound, ton) - Length (inch, foot, yard, mile) - Time (second, minute, hour) Metric units <ul style="list-style-type: none"> - Capacity (milliliter, liter) - Mass (milligram, gram, kilogram) - Length (millimeter, centimeter, meter, kilometer) | <ul style="list-style-type: none"> - "I Have, Who Has?" and match activities for units of measurement - Measure items in the classroom and convert to smaller units - Use four operations to solve word problems related to measurements of energy, fuel, natural resources. - Note taking - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

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Cluster Heading

4.M.B: Geometric measurement: understand concepts of angle and measure angles.

Performance Indicators

4.M.B.4 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle
 Measurement:
 - 4.M.B.4.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 1/360th of a circle is called a "one-degree angle," and can be used to measure angles.
 - 4.M.B.4.b: An angle that turns through one-degree angles is said to have an angle measure of degrees.

4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

4.M.B.6 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.

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Recognize an angle and find the measure of an angle that turns through a fraction of a circle. - Measure and draw angles of a specific measure using a protractor. - Recognize angles are additive. - Add and subtract to find unknown angles, representing using an equation. | Angle Ray Circle Endpoint Arc Degrees Additive Compose Decompose Unknown Protractor Variable | <ul style="list-style-type: none"> - Measure angles in art work/tape angles around the room and measure with protractor - Draw angles, decompose them and measure the resulting angles - Note taking - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

MATHEMATICS: GRADE 4
DOMAIN: DATA LITERACY

Topic and Length of Time: Topics 11 - 12 - 19 days

| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
|----------------------------------|--|--|---|
| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk Whiteboard Work | Topic Review Topic Test Quick Check Fact Assessment Performance Task | Manipulative Based Task Open Ended Project Choice Board |

Cluster Heading

4.DL.A: Organize data and understand data visualizations.

Performance Indicators

- 4.DL.A.1 Create data-based questions, generate ideas based on the questions, and then refine the questions.
- 4.DL.A.2 Develop strategies to collect various types of data and organize data digitally.
- 4.DL.A.3 Understand that subsets of data can be selected and analyzed for a particular purpose.
- 4.DL.A.4 Analyze visualizations of a single data set, share explanations and draw conclusions that the data supports.

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| <p>Students will be able to:</p> <ul style="list-style-type: none"> - Use data sets to develop, generate, and refine questions. - Develop data collection strategies and organize data digitally. - Recognize that data can be selected and analyzed for a purpose. - Analyze visual data sets and draw conclusions. | <p>Data Analyze Conclusion Graph Table</p> | <ul style="list-style-type: none"> - Find real world data sets (sports statistics, prices, etc) and generate questions - Collect data on a chosen topic and digitally organize it (ex. Google sheets, table, graphs) - Look at data sets (graphs in news articles, etc) and draw conclusions - Note taking - Guided practice - Class discussion - Independent practice |

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| | | <ul style="list-style-type: none"> - Real word application with word problems - Centers/Task Cards |
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Cluster Heading

4.DL.B: Represent and interpret measurement data.

Performance Indicators

4.DL.B.1 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.

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: <ul style="list-style-type: none"> - Read and interpret data using line plots. - Represent data using line plots and interpret data in line plots to solve problems. - Solve addition and subtraction fraction problems using data in line plots. | Line plot Fraction Difference Scale Number line Key | <ul style="list-style-type: none"> - Measure classroom objects and create a line plot - Create and answer questions based on other students' line plots - Create and analyze line plots about climate change data - Note taking - Guided practice - Class discussion - Independent practice - Real word application with word problems - Centers/Task Cards |

MATHEMATICS: GRADE 4

DOMAIN: GEOMETRY

Topic and Length of Time: Topics 15 - 16 - 22 days

| Benchmark Assessment | Formative Assessment | Summative Assessment | Alternate Assessment |
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| STAR Math STAR Math (Spanish) | Entrance Slip Exit Slip Student Reflection Math Accountable Talk Whiteboard Work | Topic Review Topic Test Quick Check Fact Assessment Performance Task | Manipulative Based Task Open Ended Project Choice Board |

Cluster Heading

4.G.A: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Performance Indicators

- 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.
- 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.
- 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.

| Student Learning Objectives | Key Vocabulary | Suggested Tasks/Activities |
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| Students will be able to: - Recognize and draw lines, points, line segments, rays, angles, and perpendicular and parallel lines. | Line Point Ray Line segment Angle | - Identify geometric terms in artwork - Use geometric figures to create art - Create art with lines of symmetry - Identify symmetry in nature |

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| <ul style="list-style-type: none"> - Use side and angle length to classify triangles. - Use angles and parallel and perpendicular lines to classify two-dimensional figures. - Define, identify, and draw lines of symmetry on two-dimensional figures. | Perpendicular lines Parallel lines Acute angle Obtuse angle Right angle Right triangle Symmetry Line of symmetry 2-dimensional figure Polygon Rectangle | <ul style="list-style-type: none"> - Use venn-diagrams to compare attributes of two-dimensional figures - Real word application with word problems - Note taking - Guided practice - Class discussion - Independent practice |
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INTERDISCIPLINARY CONNECTIONS

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| Other Core Content Areas | <p>English Language Arts</p> <ul style="list-style-type: none"> - L.KL.4.1.A: Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases. - L.KL.4.1.B: Choose words and phrases to convey ideas precisely. - RI.MF.4.6: Use evidence to show how graphics and visuals (e.g., illustrations, charts, graphs, diagrams, timelines, animations) support central ideas. - W.WR.4.5.: Conduct short research projects that use multiple reference sources (print and non-print) and build knowledge through investigation of different aspects of a topic. - SL.PE.4.1.B: Follow agreed-upon rules for discussions and carry out assigned roles. - SL.PE.4.1.C: Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. - SL.PE.4.1.D: Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. <p>Science</p> |
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| | <ul style="list-style-type: none"> - 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. <p>Social Studies</p> <ul style="list-style-type: none"> - 6.1.5.GeoSV.1: Identify the maps or types of maps most appropriate for specific purposes, (e.g., to locate physical and/or human features in a community, to determine the shortest route from one town to another town, to compare the number of people living at two or more locations). - 6.1.5.GeoSV.2: Use maps to explain the impact of location and place on the relationships between places in New Jersey, the United States and other countries. - 6.1.5.GeoSV.3: Demonstrate how to use digital geographic tools, maps and globes to measure distances and determine time zones, and locations using latitude and longitude. - 6.1.5.GeoSV.3: Demonstrate how to use digital geographic tools, maps and globes to measure distances and determine time zones, and locations using latitude and longitude. - 6.1.5.EconET.2: Use quantitative data to engage in cost benefit analyses of decisions that impact the individual and/or community. - 6.3.5.CivicsPD.3: Propose a solution to a local issue after considering evidence and the perspectives of different groups, including community members and local officials. - 6.3.5.GeoGI.1: Use technology to collaborate with others who have different perspectives to examine global issues, including climate change and propose possible solutions. |
| <p>Career Readiness, Life Literacies and Key Skills</p> | <ul style="list-style-type: none"> - 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process. - 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global. - 9.4.5.IML.3: Represent the same data in multiple visual formats in order to tell a story about the data. - 9.4.5.TL.2: Sort and filter data in a spreadsheet to analyze findings. |
| <p>Computer Science and Design Thinking</p> | <ul style="list-style-type: none"> - 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim. - 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data. - 8.1.5.AP.1: Compare and refine multiple algorithms for the same task and determine which is the most appropriate. |

MODIFICATIONS

| English Language Learners | Special Education | At-Risk | Gifted and Talented | 504 |
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| Scaffolding Word walls Sentence/paragraph frames Bilingual dictionaries/translation Think Alouds Read Alouds Highlight key vocabulary Annotation guides Think-pair-share Visual aides Modeling Cognates | Word walls Visual aides Graphic organizers Multimedia Leveled-readers Assistive technology Notes/summaries Extended time Answer masking Answer eliminator Highlighter Color Contrast | Teacher tutoring Peer tutoring Study guides Graphic organizers Extended time Parent communication Modified assignments Counseling | Curriculum compacting Challenge assignments Enrichment activities Tiered activities Independent research/inquiry Collaborative teamwork Higher level questioning Critical/Analytical thinking tasks Self-directed activities | Word walls Visual aides Graphic organizers Multimedia Leveled readers Assistive technology Notes/summaries Extended time Answer masking Answer eliminator Highlighter Color contrast Parent communication Modified assignments Counseling |