Grade: 4	**Course: Math**
Pacing Guide: 8 weeks	
Unit 1: Place Value Concepts & Number Operations of Addition, Subtraction, and Multiplication	**Big Idea:** **Chapter 1: Whole Number Place Value** **Chapter 2: Addition and Subtraction Within 10,000** **Chapter 3: Multiply by 1-Digit Numbers** **Chapter 4: Multiply by 2-Digit Numbers**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 4.OA.A.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 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. ● 4.0A.A.3 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. ● 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.* ● 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 ÷ 70 = 10 by applying concepts of place value and division.*	**English Language Arts** ● L.VL.4.2. Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. ● SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. **Science** ● 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.

● 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. ● 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. **Standards for Mathematical Practice** ● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason abstractly and quantitatively. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models. ● 8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.	**21st Century Skills** ● 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2). ● 9.4.5.IML.2: Create a visual representation to organize information about a problem or issue (e.g., 4.DL.B.5, 8.1.5.DA.3). **Technology** ● 9.4.5.TL.5: Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d). **Career Readiness, Life Literacies, and Key Skills Practices:**

	● Utilize critical thinking to make sense of problems and persevere in solving them. ● Work productively in teams while using cultural/global competence.

Student Learning Objectives (SLO)

Students will be able to…

- Explain that a digit in one place represents ten times what it would represent in the place to its right.
- Model the 10-to-1 relationship among place-value positions in the base-ten number system.
- Read and write whole numbers in standard form, word, form, and expanded form.
- Compare and order whole numbers based on the values of the digits in each number.
- Round a whole number to any place.
- Rename whole numbers by regrouping.
- Add and subtract whole numbers and determine whether solutions to problems are reasonable.
- Use the strategy draw a diagram to solve comparison problems with addition and subtraction.
- Relate and solve problems involving multiplicative comparison and additive comparisons.
- Multiply tens, hundreds, and thousands by whole numbers through 10.
- Estimate products by rounding and using compatible numbers to determine if exact answers to multiplication problems are reasonable.
- Use multiplication strategies such as the Distributive Property, expanded form, partial products, mental math, and regrouping to multiply a multidigit number by a 1-digit number.
- Use the draw a diagram strategy to solve a multistep multiplication and division problems.
- Represent and solve multistep problems using equations.
- Use area models, place value, partial products, and regrouping to multiply 2-digit numbers.
- generate a two-column table to record measurement equivalents.
- explain multiplication equations as comparisons.
- write multiplication equations given word problems indicating multiplicative comparison.
- multiply to solve word problems involving multiplicative comparison.
- divide to solve word problems involving multiplicative comparison.
- represent problems with drawings and equations, using a symbol for the unknown number.
- distinguish word problems involving multiplicative comparison from those involving additive comparison.

Academic Vocabulary	
Product, Factors, Distributive Property, Partial Product, Times as many, Sum, Difference Expanded Form, Standard Form, Word Form, Place value	
Essential Questions	***Enduring Understandings***
● What is the value of a digit based on its position in a number? ● How can we use place value to compare and order multi-digit numbers? ● How can place value help us round multi-digit numbers to the nearest ten, hundred, or thousand? ● How do you decompose a multi-digit number to show its place value? ● How can expanded form help you understand the value of each digit when adding multi-digit numbers? ● How does understanding place value help you add and subtract multi-digit numbers accurately and efficiently? ● How do you know when to carry over or regroup during addition? ● How do you know when to borrow during subtraction? ● How can breaking numbers into place value parts help you subtract more easily? ● What steps should you take to choose whether to add or subtract in a word problem? ● How do you break down a complex word problem into simpler steps to make it easier to solve? ● How do you interpret and solve multiplication comparison problems that involve "times as many" or "a certain number of times"? ● How does multiplying a number by 10, 100, or 1,000 change the value of that number? ● How can rounding numbers help you estimate the product of two numbers? ● What strategies can you use to break down multi-digit multiplication problems into smaller, more manageable steps? ● How do you use the area model or partial products to help multiply multi-digit numbers?	● The value of each digit depends on its place in the number. ● Multi-digit numbers can be broken into parts based on place value. ● Whole numbers can be compared and ordered using <, >, and = based on the values of the digits in each number. ● The value of a number increases or decreases by a factor of 10 when you multiply or divide by 10. ● Expanded form, standard form, and word form are different ways to represent numbers, all based on place value. ● Operations with multi-digit numbers such as addition, subtraction and multiplication rely on place value. ● Expanded form helps break numbers into their place value components, making addition easier to manage. ● Adding numbers in expanded form supports a clear understanding of carrying or regrouping. ● Numbers are made up of different place values (ones, tens, hundreds, etc.), and this helps organize and simplify addition and subtraction of multi-digit numbers. ● When adding digits in a place value column results in a number greater than 9, regroup by carrying over to the next place value. ● When a digit in the top number is smaller than the digit in the bottom number in a specific place value, regroup by borrowing from the next higher place value. ● Recognizing patterns and relationships between place values (such as adding multiples of ten or adjusting numbers to make them easier to add) are strategies for mentally adding and subtracting numbers.

● How does regrouping help you multiply multi-digit numbers more easily? ● Why is it important to align digits correctly when using the regrouping method in multiplication?	● Breaking down numbers into smaller parts (for example, separating tens and ones) makes subtraction easier, especially when dealing with numbers that require borrowing. ● Identifying key information in word problems, such as the numbers involved, the operation (addition or subtraction), and the question being asked helps in recognizing which operation to use and how to approach solving the problem. ● Addition is used when combining amounts or finding a total, and subtraction is used when finding the difference or determining what is left. ● Multiplication comparison problems are based on multiplicative relationships. ● Multiplication comparison diagrams visually represent equations needed to solve for unknown values. ● Multiplying by 10 shifts the digits one place to the left, multiplying by 100 shifts two places, and multiplying by 1,000 shifts three places. ● Multiplying by 10 adds a zero, multiplying by 100 adds two zeros, and multiplying by 1,000 adds three zeros. ● Rounding numbers to the nearest ten, hundred, or other place values to estimate products. ● The partial product method involves multiplying the digits in these place values separately and then adding them together to find the total product. ● The partial products method connects to the distributive property of multiplication, where a number can be multiplied by a sum of numbers. ● The regrouping multiplication method involves carrying over values from one place value to the next in order to calculate the total product. ● Through multiplication, addition, and subtraction strategies, real word multi-step word problems can be solved.
Core Instruction/Supplemental Materials	***Assessments***
● Go Math digital resources on HMH platform	**Formative**

• Interactive Student Journal • Student Journal from Go Math • Reteach and Enrich resources from Go Math • Vocabulary Cards • “Math on the Spot” videos through HMH Go Math • iTools from HMH Go Math • HMH Go Math Supplemental Slides • Math Readers from Go Math • Boddle Math • SumDog • Prodigy • Kahoot • Quizizz • Kahn Academy • iReady Learning Path and Lessons materials • Newspaper hunt to find numbers at least 6 digits long to write in each form • Find estimated amounts in new stories, on the Internet, in newspapers, or magazines • Round multidigit numbers to specific place values in a Rounding Rodeo • View Math Antics videos for rounding, division, and multiplication • Play Round and Roll game • Play Rounding Numbers Pirate game on MathPlayground.com • Teacher Created Materials • 4.OA.B Identifying Multiples • 4.OA.B Numbers in a Multiplication Table • 4.OA.C.5 Double Plus One • 4.M.A.1 Who is the tallest? • 4.OA.A.2 Comparing Money Raised • 4.NBT.A.1 Thousands and Millions of Fourth Graders • 4.NBT.A.2 Ordering 4-digit numbers • 4.NBT.A.3 Rounding on the Number Line	• Oral assessment • Exit tickets • Quizzes • Journals • Graphic Organizers • Class discussion • Interactive online games • Teacher observation • Classwork Practice • Discussion Trifolds • Video logs • Show What you Know • Lesson Quick Checks • Share and Show • Mid Chapter Checkpoints • Practice and Homework pages **Summative** • Tests • Skills assessment/Benchmarks **Alternative** • Centers/activities/games • Performance assessments • Projects

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- Social Emotional Learning: Math Reader - “Multiplying a Good Deed” by Caroline Ross.
- DIversity, Equity and Inclusion: Math Reader - “It’s All About Order” by by J. K. Schmauss

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<tr><td colspan="2">Modifications/Differentiated Activities</td></tr>
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Enrichment/Gifted and Talented

- Differentiated curriculum for the gifted learner.
- Regular classroom curricula and instruction that is adapted, modified, or replaced.
- Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials.
- Integrated G&T programming into the general education school day.
- Flexible groupings of students to facilitate differentiated instruction and curriculum.

Learning Environments:

- Extensive outside reading
- Active classroom discussion
- Innovative oral and written presentations
- Deductive and inductive reasoning
- Independent writing and research
- Divergent thinking
- Challenging problem solving situations
- Interactive, independent and interdisciplinary activities

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Multilingual Learners

- Alternate Responses
- Notes in Advance
- Extended Time
- Simplified Instruction (written and verbal)
- Online Dictionary
- Use lots of visuals
- Use physical activity; model, role-play
- Repeat/Rephrase often
- Use lower level materials when appropriate

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Special Education

GENERAL MODIFICATIONS:

- Allow outlining, instead of writing for an essay or major project
- Computerized spell-check support
- Word bank of choices for answers to test questions
- Provision of calculator and/or number line for math tests
- Film or video supplements in place of reading text

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At Risk (Intervention)

- Maximize use of community resources
- Connect family to school and school activities
- Support through transition
- Help develop compensating strategies
- Increase opportunity for positive peer group influences
- Supplemental courses

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● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies ● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	● Placement in small and interactive groups

Grade: 4	**Course: Math**
Pacing: 8 weeks	
Unit 2: Division, Factors, Multiples, & Number Patterns	**Big Idea:** **Chapter 4: Division Strategies** **Chapter 5: Divide by 1-Digit Numbers** **Chapter 6: Apply Multiplication to Area and Perimeter** **Chapter 8: Factors, Multiples, and Number Patterns**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 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. ● 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.1 ● 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. ● 4.OA.C.5 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. ● 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	**English Language Arts** ● L.VL.4.2. Determine or clarify the meaning of unknown and multiple-meaning academic and domain-specific words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. ● SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. **Science** ● 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.

between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. ● 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.* **Standards for Mathematical Practice** ● 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.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models. ● 8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.	**21st Century Skills** ● 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2). ● 9.4.5.IML.2: Create a visual representation to organize information about a problem or issue (e.g., 4.DL.B.5, 8.1.5.DA.3). **Technology** ● 9.4.5.TL.5: Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Utilize critical thinking to make sense of problems and persevere in solving them.

	● Work productively in teams while using cultural/global competence.

Student Learning Objectives (SLO)

Students will be able to…

- determine whether a number is a factor of a given number using divisibility rules.
- find common factors by using the strategy make a list.
- understand the relationship between factors and multiples.
- determine whether a number is prime or composite.
- generate a number pattern and describe features of the pattern.
- find all factor pairs for any whole number (between 1 and 100) using models.
- given a one-digit number, determine whether a given whole number (between 1 and 100) is a multiple of the one-digit number.
- determine whether a given whole number (between 1 and 100) is prime or composite.
- produce number patterns from a given rule.
- produce shape patterns from a given rule.
- analyze a sequence of numbers in order to identify features that are not obvious explicitly stated in the rule.
- 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 the relationship between multiplication and division.
- represent these operations with equations, rectangular arrays, and area models.
- explain the calculation by referring to the model (equation, array, or area model).
- solve multi-step word problems involving any of the four operations.
- solve multi-step word problems involving interpretation (in context) of a remainder.
- write equations to represent multi-step word problems, using a letter to represent the unknown quantity.
- explain why an answer is reasonable.
- use mental computation and estimation strategies to determine whether an answer is reasonable.
- Use multiples and compatible numbers to estimate quotients.
- Use models to divide whole numbers that do not divide evenly.
- Use remainders to interpret division problems.
- Divide tens, hundreds, and thousands by whole numbers to 10.
- use the Distributive Property, repeated subtraction and multiples and the Partial Quotients strategy to divide.
- use base-10 blocks to model division with regrouping.

- use place value to determine where to place the first digit of a quotient and divide multidigit numbers by 1-digit divisors.
- use a formula to find the perimeter of a rectangle.
- use a formula to find the area of a rectangle.
- find the area of combined rectangles.
- given perimeter or area, find the unknown measure of a side of a rectangle.

Academic Vocabulary
Whole number, Quotient, Remainder, Divisor, Dividend, Place value, Equation, Array, Estimation, Area, Perimeter, Fraction, Numerator, Denominator, Equivalent

Essential Questions	***Enduring Understandings***
● How can you use multiples and compatible numbers to estimate quotients? ● How can you use models to divide whole numbers that do not divide evenly? ● How can you interpret remainders in division problems? ● How can you divide numbers through thousands by whole numbers to 10? ● How can you find quotients using the following strategies: Distributive Property, repeated subtraction and multiples, and Partial Quotients? ● How can you use base-ten blocks to model division with regrouping? ● How can you use place value to know where to place the first digit and divide multidigit numbers? ● How can you use models to find factors? ● How can you use divisibility rules to tell whether one number is a factor of another number? ● How can you use the make a list strategy to solve problems with common factors? ● How are factors and multiples related? ● How can you tell whether a number is prime or composite? ● How can you make and describe number patterns?	● Understanding multiples and compatible numbers helps in making reasonable estimates when dividing. ● By identifying numbers that are close to the dividend and divisor and are easy to work with, one can estimate quotients with greater efficiency and accuracy. ● Visual models, such as arrays or number lines, offer a concrete way to break down division into equal parts and see how the remainder fits into the solution. ● A remainder represents the leftover quantity after dividing, and it can be interpreted in different ways depending on the context. ● Remainders can be kept as part of the answer, rounded up, or ignored based on the situation. ● Dividing large numbers, such as those through the thousands, by whole numbers up to 10 requires an understanding of place value and division strategies. ● The Distributive Property breaks division into easier parts by distributing the dividend across manageable factors. ● Dividing using repeated subtraction and multiples make it easier to visualize division by repeatedly subtracting the divisor from the dividend or by using multiples to find an approximate quotient.

● How can you use a formula to find the perimeter of a rectangle? ● How can you use a formula to find the area of a rectangle? ● How can you find the area of combined rectangles? ● How can you find an unknown measure of a rectangle given its area or perimeter?	● Partial quotients break division into smaller steps, simplifying larger numbers by focusing on smaller, manageable parts of the problem. ● Base-ten blocks can visually represent division, making the concept of regrouping easier to understand. ● To place the first digit of the quotient in the division process, determine which digits in the dividend are most relevant to the divisor. ● Models, such as arrays and area models, are visuals for how numbers can be broken down into equal parts to find factors of a number. ● Applying divisibility rules is a quick and efficient method for determining if one number is a factor of another. ● By listing factors systematically, you can identify the shared factors in a structured way. ● Factors are numbers that divide evenly into another number, while multiples are the results of multiplying a number by integers. ● Understanding the factor/multiple relationship helps one see patterns and make connections between multiplication and division. ● A prime number has only two factors: 1 and itself, while a composite number has more than two factors. ● Making and describing number patterns involves recognizing and understanding regular sequences in numbers, such as skip counting or identifying patterns in multiplication and division.
Core Instruction/Supplemental Materials	***Assessments***
● Go Math digital resources on HMH platform ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● “Math on the Spot” videos through HMH Go Math	**Formative** ● Oral assessment ● Exit tickets ● Quizzes ● Journals ● Graphic Organizers

• iTools from HMH Go Math • HMH Go Math Supplemental Slides • Math Readers from Go Math • Boddle Math • SumDog • Prodigy • Kahoot • Quizizz • Kahn Academy • iReady Learning Path and Lessons materials • View Math Antics videos for rounding, division, and multiplication • Scavenger hunt with task cards • Practice factoring numbers using edible counters • Make foldables for divisibility rules • Play prime or composite Slap card game • Teacher Created Materials • 4.NBT.B To regroup or not to regroup • 4.NBT.B.6 mental Division Strategy • 4.OA.A.3, 4.M.A.3 Karl's Garden • 4.NF.A.1 Explaining Fraction Equivalence with Pictures • 4.NF.A.1 Fractions and Rectangles • 4.NF.A.2 Comparing Fractions Using Benchmarks Game • 4.NF.A.2 Doubling Numerators and Denominators • 4.NF.B.3a Comparing Sums of Unit Fractions • 4.NF.B.3b making 22 Seventeenths in Different Ways • Social Emotional Learning: Math Reader - “Paint by Number” by by Marilyn Eden • DIversity, Equity and Inclusion: Math Reader - “Eratosthenes and His Sieve” by A.I. Freeman • Amistad Law - “Women Who Count: Honoring African American Women Mathematicians” by Shelly M. Jones	• Class discussion • Interactive online games • Teacher observation • Classwork Practice • Discussion Trifolds • Video logs • Show What you Know • Lesson Quick Checks • Share and Show • Mid Chapter Checkpoints • Practice and Homework pages **Summative** • Tests • Skills assessment/Benchmarks **Alternative** • Centers/activities/games • Performance assessments • Projects
Modifications/Differentiated Activities	

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● Differentiated curriculum for the gifted learner.
● Regular classroom curricula and instruction that is adapted, modified, or replaced.
● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials.
● Integrated G&T programming into the general education school day.
● Flexible groupings of students to facilitate differentiated instruction and curriculum.
Learning Environments:
● Extensive outside reading
● Active classroom discussion
● Innovative oral and written presentations
● Deductive and inductive reasoning
● Independent writing and research
● Divergent thinking
● Challenging problem solving situations
● Interactive, independent and interdisciplinary activities</td>
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● Alternate Responses
● Notes in Advance
● Extended Time
● Simplified Instruction (written and verbal)
● Online Dictionary
● Use lots of visuals
● Use physical activity; model, role-play
● Repeat/Rephrase often
● Use lower level materials when appropriate</td>
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<td>Special Education
GENERAL MODIFICATIONS:
● Allow outlining, instead of writing for an essay or major project
● Computerized spell-check support
● Word bank of choices for answers to test questions
● Provision of calculator and/or number line for math tests
● Film or video supplements in place of reading text
● Reworded questions in simpler language
● Projects instead of written reports
● Highlighting important words or phrases in reading assignments
● Modified workload or length of assignments/tests
● Modified time demands
● Pass/no pass option
● Modified grades based on IEP
BEHAVIOR MODIFICATIONS:</td>
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● Maximize use of community resources
● Connect family to school and school activities
● Support through transition
● Help develop compensating strategies
● Increase opportunity for positive peer group influences
● Supplemental courses
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● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies ● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	

Grade: 4	**Course: Math**
Pacing: 8 weeks	
Unit 3: Fractions & Decimals	**Big Idea:** **Chapter 9: Fraction Equivalencies** **Chapter 10: Compare Fractions** **Chapter 11: Add and Subtract Fractions** **Chapter 12: Multiply Fractions and Whole Numbers** **Chapter 13: Relate Fraction and Decimals**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 4.NF.A.1 Explain why a fraction *a*/*b* is equivalent to a fraction (*n* × *a*)/(*n* × *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. ● 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. ● 4.NF.B.3 Understand a fraction *a*/*b* with *a* > 1 as a sum of fractions 1/*b*. a. 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. b. 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.	**English Language Arts** ● SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points. ● SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. **Social Studies** ● 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).

● 4.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. 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 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4).* 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 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)* 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?* ● 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.* (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 is not a requirement for this grade.) ● 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.* ● 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. ● 4.M.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and	

<table>
<tr><td>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.

Standards for Mathematical Practice
● 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.</td><td></td></tr>
<tr><td>Computer Science and Design Thinking</td><td>Career Readiness, Life Literacies, and Key Skills</td></tr>
<tr><td>● 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
● 8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.</td><td>21st Century Skills
● 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
● 9.4.5.IML.2: Create a visual representation to organize information about a problem or issue (e.g., 4.DL.B.5, 8.1.5.DA.3).
Technology
● 9.4.5.TL.5: Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d).
Career Readiness, Life Literacies, and Key Skills Practices:
● Utilize critical thinking to make sense of problems and persevere in solving them.
● Work productively in teams while using cultural/global competence.</td></tr>
<tr><td colspan="2">Student Learning Objectives (SLO)</td></tr>
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Students will be able to…

- explain, using visual fraction models, why two fractions are equivalent.
- generate equivalent fractions, using fraction a/b as equivalent to fraction $(n \times a)/(n \times b)$.
- create common denominators in order to compare two fractions.
- create common numerators in order to compare two fractions.
- compare two fractions with different numerators and different denominators by comparing to a benchmark fraction.
- record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.
- decompose a fraction into a sum of fractions with the same denominator in more than one way.
- write decompositions of fractions as an equation.
- develop visual fraction models that represent decomposed fractions and use them to justify decompositions.
- add and subtract fractions having like denominators in order to solve real world problems.
- develop visual fraction models and write equations to represent real world problems involving addition and subtraction of fractions.
- add and subtract mixed numbers with like denominators.
- given a data set consisting of measurements in fractions of a unit, create a line plot.
- using measurement information presented in line plots, add and subtract fractions with like denominators in order to solve problems.
- represent a/b as a x $(1/b)$ using a visual fraction model.
- represent $n \times (a/b)$ as $(n \times a)/b$ in a visual fraction model.
- multiply a fraction by a whole number.
- solve real world problems by multiplying a fraction by a whole number, using visual fraction models and equations to represent the problem.
- add two fractions with respective denominators of 10 and 100 using equivalent fractions.
- write a decimal as a fraction that has a denominator of 10 or 100.
- represent a decimal using a model.
- compare two decimals to hundredths by reasoning about their size.
- explain that comparisons are valid only when the two decimals refer to the same whole.

Academic Vocabulary
Fraction, Numerator, Denominator, Mixed number, Product, Sum, Difference, Quotient, Decimal, Common Denominator, Common Multiple, Tenths, Hundredths

Essential Questions	***Enduring Understandings***

● How can you use models to show equivalent fractions? ● How can you use multiplication to find equivalent fractions? ● How can you write a fraction as an equivalent fraction in simplest form? ● How can you write a pair of fractions as fractions with a common denominator? ● How can you use benchmarks and common numerators or denominators to compare and order fractions? ● When can you add or subtract parts of a whole? ● How can you add and subtract fractions with like denominators using models? ● How can you add and subtract fractions with like denominators? ● How can you rename mixed numbers as fractions greater than 1 and rename fractions greater than 1 as mixed numbers? ● How can you add and subtract mixed numbers with like denominators? ● How can you rename a mixed number to help you subtract? ● How can you add fractions with like denominators using the properties of addition? ● How can you write a fraction as a product of a whole number and a unit fraction? ● How can you write a product of a whole number and a fraction as a product of a whole number and a unit fraction? ● How can you use a model to multiply a fraction by a whole number? ● How can you use the strategy draw a diagram to solve comparison problems with fractions? ● How can you record tenths and hundredths as fractions and decimals? ● How can you relate fractions, decimals, and money? ● How can you compare decimals?	● Models, such as fraction bars, number lines, or pie charts, visually represent equivalent fractions by showing how different fractions can cover the same amount or part of a whole. ● Multiplication can be used to create equivalent fractions by multiplying both the numerator and the denominator of a fraction by the same number. ● Creating equivalent fractions maintains the value of the fraction while changing its appearance. ● Writing a fraction in simplest form involves finding equivalent fractions where the numerator and denominator have no common factors other than 1. ● Writing fractions with a common denominator involves finding a number that both denominators divide into evenly, allowing for easier comparison, addition, or subtraction of fractions. ● Benchmarks (such as 0, 1/2, and 1) compare fractions by providing a reference point for understanding the relative size of a fraction. ● Using common numerators or denominators makes it easier to directly compare fractions by making their parts uniform. ● When fractions have the same denominator, meaning they are divided into equal-sized parts, one is able to add or subtract fractions. ● When adding or subtracting fractions with like denominators, add or subtract only the numerators and keep the denominator the same. ● Renaming mixed numbers as improper fractions and vice versa highlights the relationship between whole numbers and fractions. ● Renaming mixed numbers into improper fractions allows one to compute subtraction problems with more ease. ● When adding fractions with like denominators, using the commutative and associative properties of addition, allow one to group and reorder fractions in ways that make the addition process easier.

	● Writing a fraction as a product of a whole number and a unit fraction models the relationship between fractions and whole numbers. ● Writing a product of a whole number and a fraction as a product of a whole number and a unit fraction breaks down complex fraction multiplication into simpler parts. ● Using models, such as fraction bars or number lines, visually represents multiplication of a fraction by a whole number. ● Drawing diagrams, such as number lines or fraction models, helps students visually compare fractions and understand their relative sizes. ● Tenths and hundredths are specific types of fractions that can be represented both as fractions and decimals. ● Fractions, decimals, and money are all ways of representing parts of a whole. ● Fractions and decimals are used to represent parts of a dollar (like 1/2, 0.50, or 0.25) to model the connection between mathematical concepts and real-world applications, such as budgeting, shopping, and making change.
Core Instruction/Supplemental Materials	***Assessments***
● Go Math digital resources on HMH platform ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● “Math on the Spot” videos through HMH Go Math ● iTools from HMH Go Math ● HMH Go Math Supplemental Slides ● Math Readers from Go Math ● Boddle Math ● SumDog ● Prodigy ● Kahoot ● Quizizz	**Formative** ● Oral assessment ● Exit tickets ● Quizzes ● Journals ● Graphic Organizers ● Class discussion ● Interactive online games ● Teacher observation ● Classwork Practice ● Discussion Trifolds ● Video logs ● Show What you Know ● Lesson Quick Checks

• Kahn Academy • iReady Learning Path and Lessons materials • Newspaper hunt to find numbers at least 6 digits long to write in each form • Find estimated amounts in new stories, on the Internet, in newspapers, or magazines • Round multidigit numbers to specific place values in a Rounding Rodeo • View Math Antics videos for rounding, division, and multiplication • Play Round and Roll game • Play Rounding Numbers Pirate game on MathPlayground.com • Teacher Created Materials • 4.NF.B.3c Cynthia's Perfect Punch • 4.NF.B.3c Peaches • 4.DL.B.5 Button Diameters • 4.NF.B.4 Extending Multiplication From Whole Numbers to Fractions • 4.NF.B.4c Sugar in six cans of soda • 4.NF.C.5 Adding Tenths and Hundredths • 4.NF.C.6 Dimes and Pennies • 4.NF.C.6 Expanded Fractions and Decimals • 4.NF.C.7 Using Place Value • 4.M.A.2 Margie Buys Apples • Social Emotional Learning - Math Reader - “Carlota's Cooking Class” by Arianne Weber • Holocaust Law - “The Four Butterflies” by Itzik Kipnis	• Share and Show • Mid Chapter Checkpoints • Practice and Homework pages **Summative** • Tests • Skills assessment/Benchmarks **Alternative** • Centers/activities/games • Performance assessments • Projects
Modifications/Differentiated Activities	
Enrichment/Gifted and Talented • Differentiated curriculum for the gifted learner. • Regular classroom curricula and instruction that is adapted, modified, or replaced.	**Multilingual Learners** • Alternate Responses • Notes in Advance • Extended Time • Simplified Instruction (written and verbal)

● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials. ● Integrated G&T programming into the general education school day. ● Flexible groupings of students to facilitate differentiated instruction and curriculum. Learning Environments: ● Extensive outside reading ● Active classroom discussion ● Innovative oral and written presentations ● Deductive and inductive reasoning ● Independent writing and research ● Divergent thinking ● Challenging problem solving situations ● Interactive, independent and interdisciplinary activities	● Online Dictionary ● Use lots of visuals ● Use physical activity; model, role-play ● Repeat/Rephrase often ● Use lower level materials when appropriate
Special Education GENERAL MODIFICATIONS: ● Allow outlining, instead of writing for an essay or major project ● Computerized spell-check support ● Word bank of choices for answers to test questions ● Provision of calculator and/or number line for math tests ● Film or video supplements in place of reading text ● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies	**At Risk (Intervention)** ● Maximize use of community resources ● Connect family to school and school activities ● Support through transition ● Help develop compensating strategies ● Increase opportunity for positive peer group influences ● Supplemental courses ● Placement in small and interactive groups

● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	

Grade: 4	**Course: Math**
Pacing: 10 weeks	
Unit 4: Geometry, Measurement, & Data Analysis	**Big Idea:** **Chapter 14: Two Dimensional Figures** **Chapter 15: Measure Angles** **Chapter 16: Customary and Metric Measures** **Chapter 17: Temperature and Time** **Chapter 18: Represent and Interpret Data**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 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. ● 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. ● 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	**English Language Arts** ● SL.ES.4.3. Identify the reasons and evidence a speaker provides to support particular points. ● SL.AS.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. **Science** ● 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.

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.
- 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.
    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 1/360 of a circle is called a “one-degree angle,” and can be used to measure angles.
    b. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* 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.
- 4.DL.A.1 Create data-based equations, 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 data supports.

Standards for Mathematical Practice

● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason abstractly and quantitatively. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.7 Look for and make use of structure.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models. ● 8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.	**21st Century Skills** ● 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2). ● 9.4.5.IML.2: Create a visual representation to organize information about a problem or issue (e.g., 4.DL.B.5, 8.1.5.DA.3). **Technology** ● 9.4.5.TL.5: Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Work productively in teams while using cultural/global competence.
Student Learning Objectives (SLO)	
Students will be able to… ● draw points, lines, line segments and rays. ● draw angles (right, acute, obtuse). ● draw perpendicular and parallel lines. ● distinguish between lines, line segments, and rays. ● identify points, lines, line segment, rays, right angles, acute angles, obtuse angles, perpendicular lines and parallel lines in two-dimensional figures. ● classify triangles based on the presence or absence of perpendicular lines and based on the presence or absence of angles of a particular size.	

- classify quadrilaterals based on the presence or absence of parallel or perpendicular lines and based on the presence or absence of angles of a particular size.
- fold a figure along a line in order to create matching parts.
- identify lines of symmetry as a line across the figure such that the figure can be folded along the line into matching parts.
- identify figures having line symmetry.
- draw lines of symmetry.
- describe an angle as measured with reference to a circle with the center of the circle being the common endpoint of the rays.
- explain a 'one-degree angle' and its relation to a circle; a "degree" is defined as 1/360 (one degree angle) of the entire circle.
- measure angles in whole-number degrees.
- given an angle measure, sketch the angle.
- add and subtract to find unknown angles on a diagram in real world and mathematical problems.
- write an equation with a symbol for the unknown angle measure.
- solve multi-step word problems involving any of the four operations.
- solve multi-step word problems involving interpretation (in context) of a remainder.
- write equations to represent multi-step word problems, using a letter to represent the unknown quantity.
- explain why an answer is reasonable.
- use mental computation and estimation strategies to determine whether an answer is reasonable.
- add using the standard algorithm with accuracy and efficiency.
- subtract using the standard algorithm with accuracy and efficiency.
- solve word problems (using addition, subtraction and multiplication) involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals.
- solve word problems (using all four operations) involving whole number distances, intervals of time, liquid volumes, masses of objects, and money, including problems requiring expressing measurements given in a larger measurement unit in terms of a smaller measurement unit (conversion).
- construct diagrams (e.g. number line diagrams) to represent measurement quantities.
- add using the standard algorithm with accuracy and efficiency.
- subtract using the standard algorithm with accuracy and efficiency.

Academic Vocabulary

Point, Line, Line segment, Ray, Angle, Right angle, Acute angle, Obtuse angle, Perpendicular, Parallel, Quadrilateral, Symmetry, Line Symmetry, Degree, Remainder, Estimation, Metric, Line Plot

Essential Questions	***Enduring Understandings***
● How can you identify and draw points, lines, line segments, rays, and angles? ● How can you classify triangles by the size of their angles? ● How can you identify and draw parallel lines and perpendicular lines? ● How can you sort and classify quadrilaterals? ● How do you find lines of symmetry? ● How can you relate angles, degrees, and fractional parts of a circle? ● How can you use a protractor to measure and draw angles? ● How can you determine the measure of an angle separated into parts? ● How can you use benchmarks to understand the relative sizes of measurement units? ● How can you use models to compare customary units of length, weight, liquid volume, and time? ● How can frequency tables help collect and organize data? ● How can you make and interpret line plots with fractional data? ● How can you compare metric units of mass and liquid volume? ● How can you solve elapsed time problems? ● How can you solve problems involving mixed measures? ● How can you use patterns to write number pairs for measurement units? ● How can I describe a set of data using mode, median, and range? ● How can I make stem-and-leaf plots with whole numbers?	● Points, lines, line segments, rays, and angles are the foundational building blocks of geometry. ● Understanding how to identify and draw these lines, segments, and rays help one recognize and describe geometric shapes and relationships. ● Triangles can be classified based on the size of their angles into categories like acute, right, and obtuse. ● Parallel lines never intersect and remain equidistant from each other, while perpendicular lines intersect at a right angle. ● Quadrilaterals, such as squares, rectangles, parallelograms, and trapezoids, can be classified based on their properties, such as the length of sides, the number of parallel sides, and the size of angles. ● A line of symmetry divides a shape into two identical halves. ● Angles are measured in degrees, and the full rotation of a circle contains 360 degrees. ● A protractor is a tool used to measure and draw angles, providing a way to quantify angles and construct precise geometric shapes. ● An angle can be divided into smaller parts, and the total measure of these parts equals the measure of the entire angle. ● Benchmarks, such as familiar standard measurements (like 1 inch or 1 centimeter), help compare and estimate measurements in different units. ● Models, such as number lines or visual representations, help compare different units of measurement (e.g., inches, pounds, gallons, and hours). ● Frequency tables help to collect, organize, and display data in an easy-to-understand format, allowing for quick, identifiable patterns or trends in data. ● Line plots help students organize and display fractional data, making it easier to see trends and relationships.

	• Understanding the relationship between metric units of mass (grams, kilograms) and liquid volume (milliliters, liters) helps make meaningful comparisons and conversions between different types of measurements. • Solving elapsed time problems involves understanding the relationship between the start and end times and calculating the difference between them. • Mixed measures, such as a combination of feet and inches or hours and minutes, require an understanding of how to convert between different units and perform operations. • Identifying and using patterns in measurement units helps one recognize relationships between different units (e.g., inches to feet, grams to kilograms). • The mode, median, and range are key ways to describe the central tendency and spread of data. • The mode tells us the most common value, the median provides the middle value when the data is ordered, and the range shows the difference between the highest and lowest values. • Stem-and-leaf plots are a way to organize and display numerical data, allowing a visual representation of the distribution of numbers in a set. • In a stem-and-leaf plot, the "stem" represents the leading digits, while the "leaf" shows the trailing digits.
Core Instruction/Supplemental Materials	***Assessments***
• Go Math digital resources on HMH platform • Interactive Student Journal • Student Journal from Go Math • Reteach and Enrich resources from Go Math • Vocabulary Cards • “Math on the Spot” videos through HMH Go Math • iTools from HMH Go Math • HMH Go Math Supplemental Slides • Math Readers from Go Math	**Formative** • Oral assessment • Exit tickets • Quizzes • Journals • Graphic Organizers • Class discussion • Interactive online games • Teacher observation

• Boddle Math • SumDog • Prodigy • Kahoot • Quizizz • Kahn Academy • iReady Learning Path and Lessons materials • Newspaper hunt to find numbers at least 6 digits long to write in each form • Find estimated amounts in new stories, on the Internet, in newspapers, or magazines • Round multidigit numbers to specific place values in a Rounding Rodeo • View Math Antics videos for rounding, division, and multiplication • Play Round and Roll game • Play Rounding Numbers Pirate game on MathPlayground.com • Teacher Created Materials • 4.G.A.1 The Geometry of Letters • 4.G.A.1 What's the Point? • 4.G.A.2 Are these right? • 4.G.A.2 Defining Attributes of Rectangles and Parallelograms • 4.G.A.3 Finding Lines of Symmetry • 4.G.A.3 Lines of symmetry for triangles • 4.M.B.5, 4.M.B.6, 4.G.A.1 Measuring Angles • 4.M.B.6, 4.G.A.2 Finding an unknown angle • 4.OA.A.3 Carnival Tickets	• Classwork Practice • Discussion Trifolds • Video logs • Show What you Know • Lesson Quick Checks • Share and Show • Mid Chapter Checkpoints • Practice and Homework pages **Summative** • Tests • Skills assessment/Benchmarks **Alternative** • Centers/activities/games • Performance assessments • Projects
Modifications/Differentiated Activities	
Enrichment/Gifted and Talented • Differentiated curriculum for the gifted learner. • Regular classroom curricula and instruction that is adapted, modified, or replaced.	**Multilingual Learners** • Alternate Responses • Notes in Advance • Extended Time • Simplified Instruction (written and verbal)

● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials. ● Integrated G&T programming into the general education school day. ● Flexible groupings of students to facilitate differentiated instruction and curriculum. Learning Environments: ● Extensive outside reading ● Active classroom discussion ● Innovative oral and written presentations ● Deductive and inductive reasoning ● Independent writing and research ● Divergent thinking ● Challenging problem solving situations ● Interactive, independent and interdisciplinary activities	● Online Dictionary ● Use lots of visuals ● Use physical activity; model, role-play ● Repeat/Rephrase often ● Use lower level materials when appropriate
Special Education GENERAL MODIFICATIONS: ● Allow outlining, instead of writing for an essay or major project ● Computerized spell-check support ● Word bank of choices for answers to test questions ● Provision of calculator and/or number line for math tests ● Film or video supplements in place of reading text ● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies	**At Risk (Intervention)** ● Maximize use of community resources ● Connect family to school and school activities ● Support through transition ● Help develop compensating strategies ● Increase opportunity for positive peer group influences ● Supplemental courses ● Placement in small and interactive groups

● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	