Little Egg Harbor School District
Curriculum Guide

Mathematics: Fifth Grade

BOE APPROVAL DATE: 08/19/2025

Original Adoption:	August 2024
Created by:	Ocean County Curriculum Consortium
Revised on:	August 1, 2024
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Little Egg Harbor School District Mathematics Curriculum	
Content Area: Mathematics	
Course Title: Elementary	**Grade Level: Fifth**
Operations and Algebraic Thinking	**20 Days**
Number and Operations in Base Ten	**50 Days**
Number and Operations - Fractions	**50 Days**
Measurement	**25 Days**
Data Literacy	**15 Days**
Geometry	**20 Days**

Introduction

Vision for Mathematics Education in New Jersey

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

- Leverages data in decision-making and as a lens for discussing, analyzing, and responding to practical questions.
- Persists to make sense of and model problems arising in everyday life, society, and the workplace.
- Thinks critically and strategically to assess quantitative relationships and to solutions to complex problems.
- Employs precise reasoning and constructs viable arguments to deduce conclusions, recognize false statements and assess peers' reasoning.
- Interprets, evaluates and critiques the mathematics embedded in social, scientific and commercial systems, as well as the claims made in the private and public sectors.

In Grade 5, instruction focuses broadly on three critical areas:

1. Developing accuracy and efficiency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions);
2. Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing accuracy and efficiency with whole number and decimal operations; and
3. Developing understanding of volume.

Critical Areas

1. Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop accuracy and efficiency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)
2. Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize accuracy and efficiency with multi-digit addition, subtraction, and multiplication. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.
3. Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.

Alignment with State Mandates
The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements: ● Holocaust and genocides (N.J.S.A. 18A:35-28) ● History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43) ● Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a) ● Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Operations and Algebraic Thinking	**Duration:** 20 days

Standards/Learning Targets
Focus Standards (Major Standards)
● **5.OA.A.** Write and interpret numerical expressions. ● **5.OA.A1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. ● **5.OA.A2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 x (8 + 7). Recognize that 3 x (18,932 + 921) is three times as large as 18,932 + 921 without having to calculate the indicated sum or product. ● **5.OA.B.** Analyze patterns and relationships. ● **5.OA.B.3** Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.

Supporting and Additional Standards

- **5.NBT.A.3a** Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (\frac{1}{10}) + 9 \times (\frac{1}{100}) + 2 \times (\frac{1}{1000})$.
- **5.NBT.B.5** Fluently multiply multi-digit whole numbers using the standard algorithm.
- **5.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
- **5.G.A.2** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Primary Interdisciplinary Connections

English Language Arts

- **RI.CI.5.2.** Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.
- **RI.MF.5.6.** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.
- **SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

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.
- **5-ESS1-2** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Computer Science and Design Thinking Standards

- **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.
- **8.2.5.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.
- **8.1.5.AP.1:** Compare and refine multiple algorithms for the same task and determine which is the most appropriate.

Career Readiness, Life Literacies, and Key Skills Standards

- **9.1.5.PB.2:** Describe choices consumers have with money (e.g., save, spend, donate).
- **9.4.5.CI.3:** Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
- **9.4.5.CT.1:** Identify and gather relevant data that will aid in the problem-solving process.
- **9.4.5.IML.3:** Represent the same data in multiple visual formats in order to tell a story about the data.

Evidence of Student Learning

Performance Tasks/Use of Technology

- i-Ready Math in Action
- i-Ready MyPath
- i-Ready Fluency Flight
- IXL
- Standards-based activities and tasks
  - Illustrative Math Tasks - Fifth Grade
  - Math Milestones Tasks - Fifth Grade
  - Math Is Visual videos & Tasks
- Google Slides & Forms
- Digital Review Platforms - Kahoot / Blooket
- Flipgrid
- NCTM Illuminations
- Splash Learn - Games for Kids

Assessments

Formative

- Exit slips
- Teacher observations/anecdotal/checklists
- i-Ready games
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative

- i-Ready Mid-Unit Assessments
- i-Ready Unit Assessments
- Digital Comprehension Checks

• ABCya! - Games for Kids • Multiplication.com - Games	• Unit & Cumulative Reviews • LinkIt Progress Monitoring Standard Assessments **Benchmark** • i-Ready Assessments (Fall, Winter, Spring) • District-wide Common Benchmark Assessments **Alternative** • Performance Tasks • Extension Projects • Written/verbal explanations • Peer assessment • Self-assessment • Untimed Fact Practice Assessment • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	**Skills**
Essential Questions: • Why do you use parentheses, brackets, or braces when evaluating numerical expressions? • How can you use words and scenarios to write and interpret numerical expressions? • How can you determine the "10 times" or "$\frac{1}{10}th$" relationships between multi-digit numbers? • Why is it necessary to generate numerical patterns using rules to form ordered pairs and exhibit how to graph on a coordinate plane? **Enduring Understandings:** *Students will know…" I can….."* • Evaluate expressions following the order of operations.	**Students will be able to:** • Evaluate numerical expressions with parentheses, brackets, and braces (including expressions containing fractions and decimals). • Use parentheses, brackets, or braces to group parts of a numerical expression. • Interpret and write numerical expressions without evaluating them. • Generate terms in numerical patterns using two given rules. • Identify and explain apparent relationships between corresponding terms. • Form ordered pairs consisting of corresponding terms based on two patterns and graph the ordered pairs on the

• Write a numerical expression to represent a phrase using parentheses, brackets and braces appropriately. • Generate a numerical pattern using a rule. • Graph ordered pairs on a coordinate plane. • Describe the relationship between corresponding terms of two number patterns	coordinate plane.
Instructional Plan	
Suggested Activities	**Resources**
• Holocaust Curriculum Guide 5th grade • *Zero* by Kathryn Otoshi • *One Grain of Rice: A Mathematical Folktale* by Demi • *Usha and the Big Digger* By Amitha Jagannath Knight • *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca • *My Rows and Piles of Coins* by Tololwa M. Mollel	• Ready Mathematics Program • i-Ready MyPath • IXL • Seesaw • Class Dojo • **NJSLS and iRCL 2024 Padlet** • Manipulatives by iReady Lessons • Achieve the Core Coherence Map • Multiples Charts • Number Lines • Word Walls • Anchor Charts As appropriate: ○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn

	Differentiate according to formative assessments and i-Ready Diagnostic individualized path ● Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click REINFORCE and use the resources shown ● Resources for students **approaching** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click RETEACH and use the resources shown ● Resources for students **exceeding** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click EXTEND and use the resources shown Useful links / online resources ● Math Vocabulary Graphic Organizer

Suggested Options for Differentiation
Multilingual Learners ● Simplify written and verbal instructions ● Provide written directions with models and diagrams when possible ● Build in more group work to allow ML students to interact and communicate with peers ● Provide vocabulary ahead of time ● Use sentence frames to give students practice with academic language ● Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class ● Utilize visual charts/cues ● Highlight key words ● Provide manipulatives ● Frequently check for understanding ● Involve families in student learning ● Provide social/emotional support ● Respect cultural traditions ● Show photos, videos, and definitions when possible for culturally unique vocabulary ● Provided students with necessary academic resources and materials ● Allow for alternative assignments ● Provide visuals ● Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps **Special Education/504 Plans** ● Follow specific students accommodations and modifications as listed in individual student IEPs ● Preferential seating. ● Provide special lighting or acoustics. ● Provide a space with minimal distractions. ● Administer a test in a small group setting. ● Behavior management support. ● Adjusted class schedules or grading. ● Extended time on tests and assignments. ● Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning

- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Assign peer tutor
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

Core Instructional and Supplemental Materials

- Ready Mathematics Program (Teacher / Student Editions)
- i-Ready MyPath and digital resources
- Manipulatives
- District Approved Online Programs
- Workstations with open-ended tasks

As appropriate:

- Boom Cards
- VB-Mapp
- ABLLS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn

Varied Levels of Text:

- Multiplication Read Alouds
- Marilyn Burns Math Library List
- EPIC

Teacher Notes / Reflections

Number and Operations in Base Ten	**Duration:** 50 days

Standards/Learning Targets

Focus Standards (Major Standards)

- **5.NBT.A.** Understand the place value system.
- **5.NBT.A.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
- **5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
- **5.NBT.A.3** Read, write, and compare decimals to thousandths.
- **5.NBT.A.3a** Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (\frac{1}{10}) + 9 \times (\frac{1}{100}) + 2 \times (\frac{1}{1000})$.
- **5.NBT.A.3b** Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
- **5.NBT.A.4** Use place value understanding to round decimals to any place.
- **5.NBT.B.** Perform operations with multi-digit whole numbers and with decimals to hundredths.
- **5.NBT.B.5** Fluently multiply multi-digit whole numbers using the standard algorithm.
- **5.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Supporting and Additional Standards

- **5.OA.A1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

- **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example,
  $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{5}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad = bc)}{bd}$).
- **5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.
- **5.M.A.1** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
- **5.M.B.4** Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

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English Language Arts

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  - Math Is Visual videos & Tasks
- Google Slides & Forms
- Digital Review Platforms - Kahoot / Blooket
- Flipgrid
- NCTM Illuminations
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- ABCya! - Games for Kids

Assessments

Formative

- Exit slips
- Teacher observations/anecdotal/checklists
- i-Ready games
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative

- i-Ready Mid-Unit Assessments
- i-Ready Unit Assessments
- Digital Comprehension Checks
- Unit & Cumulative Reviews

• Multiplication.com - Games	• LinkIt Progress Monitoring Standard Assessments **Benchmark** • i-Ready Assessments (Fall, Winter, Spring) • District-wide Common Benchmark Assessments **Alternative** • Performance Tasks • Extension Projects • Written/verbal explanations • Peer assessment • Self-assessment • Untimed Fact Practice Assessment • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	**Skills**
Essential Questions: • Why is it important to understand the relationship between a product and the magnitude of its factors? • What models and strategies do we use to add, subtract, multiply, and divide decimals to hundredths? • Why is it important to understand the place value of decimals to hundredths and whole numbers to billions? • How are whole numbers and decimals written, compared and ordered? • How can place value patterns help in multiplying and dividing decimals by a power of 10? • What are the different ways numbers can be read and written?	*Students will be able to..* • Explain the value of a digit in a place represents 10 times as much as it represents in the place to its right. • Explain patterns in the number of zeros of the product when multiplying by powers of 10. • Explain patterns in the movement of the decimal point when a decimal is multiplied or divided by a power of 10. • Denote powers of 10 by using whole-number exponents. • Read and write decimals to thousandths using base-ten numerals, number names, and expanded form. • Compare the value of two decimals (to thousandths) based on place value understanding using >, < or =.

• How can the place value system be useful in converting among different-sized metric units within a given measurement system? • Why is it important to understand the standard algorithm in order to fluently multiply multi-digit numbers? • What is the benefit to using the standard algorithm to multiply 3-digit whole numbers by 1-digit whole numbers? • Why use various methods when dividing whole number quotients with four-digit dividends and 2-digit divisors? **Enduring Understandings:** *Students will know… "I can…"* • Use patterns to understand multiplying and dividing whole numbers and decimals by powers of 10. • Read, write and compare decimals to the thousandths place in numerical, word and expanded forms. • Compare decimals to the thousandths place using comparison symbols (>, < or =). • Fluently multiply multi-digit whole numbers using the standard algorithm. • Understand multiplication as scaling and be able to determine if the product will be larger or smaller than the first factor without computing. • Divide to find a whole number quotient and remainder with four-digit dividends and one-digit divisors using a variety of strategies. • Explain division valuations with rectangular arrays, area models and/or equations. • Add, subtract, multiply and divide decimals to the hundredths using a variety of strategies.	• Multiply multi-digit whole numbers using the standard algorithm working towards accuracy and efficiency. • Divide to find whole-number quotients with up to four-digit dividends and two-digit divisors using strategies based on place value. • Divide find whole-number quotients with up to four-digit dividends and two-digit divisors using strategies based on properties of operations or the relationship between multiplication and division. • Illustrate and explain the division calculation by using equations, rectangular arrays, and/or area models. • Add and subtract decimals to hundredths using strategies based on place value, properties of operations, or drawings. and/or the relationship between addition and subtraction. • Relate the strategy to the concrete model or drawing, and explain the reasoning used.

Instructional Plan	
Suggested Activities	**Resources**
• Amistad Activity :6.1.2.CivicsCM.3: Connect to Amistad Law fraction review Students use fraction review sheets to apply understanding of the skill while learning facts about famous African Americans throughout history. • *Zero* by Kathryn Otoshi • *One Grain of Rice: A Mathematical Folktale* by Demi • *Usha and the Big Digger* By Amitha Jagannath Knight • *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca • *My Rows and Piles of Coins* by Tololwa M. Mollel	• Ready Mathematics Program • i-Ready MyPath • IXL • Seesaw • Class Dojo • NJSLS and iRCL 2024 Padlet • Manipulatives by iReady Lessons • Achieve the Core Coherence Map • Multiples Charts • Number Lines • Word Walls • Anchor Charts As appropriate: ○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn Differentiate according to formative assessments and i-Ready Diagnostic individualized path • Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click REINFORCE and use the resources

	shown ● Resources for students **approaching** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click RETEACH and use the resources shown ● Resources for students **exceeding** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click EXTEND and use the resources shown Useful links / online resources ● Hunt for Decimals ● Representing Decimals ● Rounding Decimals on a Number Line ● Roll and Round

Suggested Options for Differentiation

Multilingual Learners

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class

- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry

- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
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- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals

- Assign peer tutor
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

Core Instructional and Supplemental Materials

- Ready Mathematics Program (Teacher / Student Editions)
- i-Ready MyPath and digital resources
- Manipulatives
- District Approved Online Programs
- Workstations with open-ended tasks

As appropriate:

- Boom Cards
- VB-Mapp
- ABLLS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn

Varied Levels of Text:

- Multiplication Read Alouds
- Marilyn Burns Math Library List
- EPIC

Teacher Notes / Reflections

Number and Operations - Fractions	**Duration:** 50 days

Standards/Learning Targets

Focus Standards (Major Standards)

- **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.
- **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$).
- **5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.
- **5.NF.B** Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
- **5.NF.B.3** Interpret a fraction as division of the numerator by the denominator ($\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?
- **5.NF.B.4** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
- **5.NF.B.4a** Interpret the product $(\frac{a}{b}) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(\frac{2}{3}) \times 4 = \frac{8}{3}$, and create a story context for this equation. Do the same with $(\frac{2}{3}) \times (\frac{4}{5}) = \frac{8}{15}$. (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = (\frac{ac}{bd})$).

- **5.NF.B.4b** Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- **5.NF.B.5** Interpret multiplication as scaling (resizing), by:
- **5.NF.B.5a** Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
- **5.NF.B.5b** Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of multiplying $\frac{a}{b}$ by 1.
- **5.NF.B.6** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- **5.NF.B.7a** Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.For example, create a story context for $(\frac{1}{3}) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{3}) \div 4 = \frac{1}{12}$ because $(\frac{1}{12}) \times 4 = \frac{1}{3}$.
- **5.NF.B.7b** Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (\frac{1}{5})$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$.
- **5.NF.B.7c** Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $\frac{1}{2}$ lb. of chocolate equally? How many $\frac{1}{3}$-cup servings are in 2 cups of raisins?

Supporting and Additional Standards

- **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

- **5.DL.B.5** Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

Primary Interdisciplinary Connections

English Language Arts

- **RI.CI.5.2.** Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.
- **RI.MF.5.6.** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.
- **SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

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.
- **5-ESS1-2** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Computer Science and Design Thinking Standards

- **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.
- **8.2.5.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.

Career Readiness, Life Literacies, and Key Skills Standards

- **9.1.5.PB.2:** Describe choices consumers have with money (e.g., save, spend, donate).
- **9.4.5.CI.3:** Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity. .
- **9.4.5.CT.1:** Identify and gather relevant data that will aid in the problem-solving process.
- **9.4.5.IML.3:** Represent the same data in multiple visual formats in order to tell a story about the data.

Evidence of Student Learning

Performance Tasks/Use of Technology

- i-Ready Math in Action
- i-Ready MyPath
- i-Ready Fluency Flight
- IXL
- Standards-based activities and tasks
  - Illustrative Math Tasks - Fifth Grade
  - Math Milestones Tasks - Fifth Grade
  - Math Is Visual videos & Tasks
- Google Slides & Forms
- Digital Review Platforms - Kahoot / Blooket
- Flipgrid
- NCTM Illuminations
- Splash Learn - Games for Kids
- ABCya! - Games for Kids
- Multiplication.com - Games

Assessments

Formative

- Exit slips
- Teacher observations/anecdotal/checklists
- i-Ready games
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative

- i-Ready Mid-Unit Assessments
- i-Ready Unit Assessments
- Digital Comprehension Checks
- Unit & Cumulative Reviews
- LinkIt Progress Monitoring Standard Assessments

Benchmark

- i-Ready Assessments (Fall, Winter, Spring)
- District-wide Common Benchmark Assessments

Alternative

- Performance Tasks
- Extension Projects
- Written/verbal explanations
- Peer assessment

	• Self-assessment • Untimed Fact Practice Assessment • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	**Skills**
Essential Questions: • What are equivalent fractions and how can they help us add and subtract fractions with unlike denominators? • What visual models are useful in adding and subtracting fractions? • How can estimating and using benchmark fractions help us to determine if our solutions are reasonable? • How are multiplying and dividing with whole numbers similar/different to working with fractional amounts? • How can we use visual fraction models or equations to represent dividing fractions? • Why is it important to use visual models when multiplying fractions by mixed numbers? • How do tiling unit squares help us in finding the area of a rectangle with fractional side lengths? • How does the magnitude of the factor we multiply or divide by determine the product or quotient when working with fractions? • How can we visualize division of fractions using models? • What methods can be used to solve real world problems involving multiplication or division of fractions?	**Students will be able to:** • Use equivalent fractions to add or subtract fractions, with unlike denominators. • Add and subtract fractions with unlike denominators, including mixed numbers, by replacing given fractions with equivalent fractions that share a common denominator. • Solve word problems using equations and visual models involving addition and subtraction of fractions. • Utilize benchmark fractions and number sense to estimate and assess the reasonableness of solutions. • Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. • Interpret a fraction as division of the numerator by the denominator using visual fraction models or equations. • Solve word problems involving division of whole numbers resulting in a fraction or mixed number quotient. • Interpret the product $(a/b) \times q$ as a part of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ **

Enduring Understandings: *Students will know… "I can…"* ● Use models to show different ways of adding and subtracting fractions. ● Write equivalent fractions to add or subtract fractions with unlike denominators. ● Apply and extend previous understandings of multiplication and division to multiply and divide fractions. ● Use models and equations to express multiplication and division problems. ● Connect the relationship between multiplication and division and how it can help solve problems working with fractions. ● Calculate area of a rectangle by tiling and multiplying the side lengths.	● Find the area of a rectangle with fractional side lengths in multiple ways. ● Show that finding the area by tiling would be the same as multiplying the side lengths. ● Interpret multiplication as scaling (resizing) by comparing the size of a product to the size of one factor without performing the multiplication ● Explain patterns of multiplying fractions by numbers more than one or less than one and how it impacts the magnitude of their product. ● Solve real-world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions.
Instructional Plan	
Suggested Activities	**Resources**
● Climate Change Example: To examine the impact climate change has on agriculture, students may solve real-world problems about the reduced yields of staple crops and their distribution that involve division of unit fractions by non-zero whole numbers and/or division of whole numbers by unit fractions. ● *Zero* by Kathryn Otoshi ● *One Grain of Rice: A Mathematical Folktale* by Demi ● *Usha and the Big Digger* By Amitha Jagannath Knight ● *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca	● Ready Mathematics Program ● i-Ready MyPath ● IXL ● Seesaw ● Class Dojo ● NJSLS and iRCL 2024 Padlet ● Manipulatives by iReady Lessons ● Achieve the Core Coherence Map ● Multiples Charts ● Number Lines ● Word Walls

● *My Rows and Piles of Coins* by Tololwa M. Mollel	● Anchor Charts As appropriate: ○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn Differentiate according to formative assessments and i-Ready Diagnostic individualized path ● Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click REINFORCE and use the resources shown ● Resources for students **approaching** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click RETEACH and use the resources shown ● Resources for students **exceeding** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level

	■ Click EXTEND and use the resources shown Useful links / online resources ● Divide a Unit Fraction by a Whole Number ● Divide a Whole Number by a Unit Fraction (V. 1) ● Divide a Whole Number by a Unit Fraction (V. 2)

Suggested Options for Differentiation

Multilingual Learners

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs

- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere

- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Assign peer tutor
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
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Core Instructional and Supplemental Materials

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- SplashLearn

Varied Levels of Text:

- Multiplication Read Alouds
- Marilyn Burns Math Library List
- EPIC

Teacher Notes / Reflections

Measurement	**Duration:** 25 days

Standards/Learning Targets

Focus Standards (Major Standards)

- **5.M.A** Convert like measurement units within a given measurement system.
- **5.M.A.1** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
- **5.M.B** Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
- **5.M.B.2** Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
- **5.M.B.2a** A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
- **5.M.B.2b** A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units.
- **5.M.B.3** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.
- **5.M.B.4** Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
- **5.M.B.4a** Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes (e.g., to represent the associative property of multiplication).
- **5.M.B.4b** Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
- **5.M.B.4c** Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non overlapping parts, applying this technique to solve real world problems.

Supporting and Additional Standards

- **5.NBT.B.5** Fluently multiply multi-digit whole numbers using the standard algorithm.

- **5.OA.A2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 x (8 + 7). Recognize that 3 x (18,932 + 921) is three times as large as 18,932 + 921 without having to calculate the indicated sum or product.
- **5.G.B.3** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
- **5.G.B.4** Classify two-dimensional figures in a hierarchy based on properties.

Primary Interdisciplinary Connections

English Language Arts

- **RI.CI.5.2.** Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.
- **RI.MF.5.6.** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.
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Science

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- i-Ready MyPath
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- Digital Review Platforms - Kahoot / Blooket
- Flipgrid
- NCTM Illuminations
- Splash Learn - Games for Kids
- ABCya! - Games for Kids
- Multiplication.com - Games

Assessments

Formative

- Exit slips
- Teacher observations/anecdotal/checklists
- i-Ready games
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative

- i-Ready Mid-Unit Assessments
- i-Ready Unit Assessments
- Digital Comprehension Checks
- Unit & Cumulative Reviews
- LinkIt Progress Monitoring Standard Assessments

Benchmark

- i-Ready Assessments (Fall, Winter, Spring)
- District-wide Common Benchmark Assessments

Alternative

- Performance Tasks
- Extension Projects

	● Written/verbal explanations ● Peer assessment ● Self-assessment ● Untimed Fact Practice Assessment ● Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	**Skills**
Essential Questions: ● What are the customary measurement units and how are they related? ● What are the metric measurement units and how are they related? ● How can we convert different-sized standard measurement units (i.e., cm. to m.? ● How are length, weight, and volume the same/different? ● When might you use length/weight/volume to measure an object? ● How does knowing the smaller units of a larger measurement tool help you solve a problem? ● What tool is the best tool to measure …? (customary and metric)? ● How can we measure volume using unit cubes? **Enduring Understandings:** *Students will know… "I can…"* ● Solve mult-step problems using measurements within a given system.	**Students will be able to:** ● Convert among different-sized standard measurement units within a given measurement system. ● Use conversions in solving multi-step, real-world problems. ● Use "unit cubes" to measure volume in cubic units. ● Apply the associative property of multiplication to finding the area using the three dimensional measurements of a rectangular prism. ● Measure volumes by counting unit cubes, using cubic cm, cubic in., cubic ft., and non-standard units. ● Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths. ● Represent volumes as the product of three whole numbers using $V = l \times w \times h$. ● Recognize volume as additive by finding volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

• Convert customary units of length, weight, and liquid volume. • Convert metric units of length, mass, and liquid volume. • Find the volume of solid figure by counting cubes • Find volume by using a formula • Break apart a solid figure into rectangular prisms to find its volume. • Determine the volume of non-rectangular prisms by breaking apart the object into additive parts to solve real-world problems. • Use the formula of $V = l \times w \times h$ to find the volume of a rectangular prism.	
Instructional Plan	
Suggested Activities	**Resources**
• Have students choose a rectangular prism. Measure the dimensions and determine the volume. Students can make predictions to compare cubic units and then use the calculations to prove which object has the greatest/least volume. This could be used as a diversity lesson to discuss making judgements based on appearances. • *Zero* by Kathryn Otoshi • *One Grain of Rice: A Mathematical Folktale* by Demi • *Usha and the Big Digger* By Amitha Jagannath Knight • *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca • *My Rows and Piles of Coins* by Tololwa M. Mollel	• Ready Mathematics Program • i-Ready MyPath • IXL • Seesaw • Class Dojo • NJSLS and iRCL 2024 Padlet • Manipulatives by iReady Lessons • Achieve the Core Coherence Map • Multiples Charts • Number Lines • Word Walls • Anchor Charts As appropriate:

	○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn Differentiate according to formative assessments and i-Ready Diagnostic individualized path ● Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click REINFORCE and use the resources shown ● Resources for students **approaching** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click RETEACH and use the resources shown ● Resources for students **exceeding** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click EXTEND and use the resources shown Useful links / online resources

	• Measuring Classroom Objects • What's the Volume? • Exploring Volume • Roll a Rectangular Prism • Find the Volume

Suggested Options for Differentiation

Multilingual Learners

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.

- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.

- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
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- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Assign peer tutor
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps
- Provide positive praise to increase motivation
- Provide real world connections and emphasize the value of education
- Communicate high expectations for the success of all students
- Integrate the arts into learning activities

Core Instructional and Supplemental Materials

- Ready Mathematics Program (Teacher / Student Editions)
- i-Ready MyPath and digital resources
- Manipulatives
- District Approved Online Programs
- Workstations with open-ended tasks

As appropriate:

- Boom Cards
- VB-Mapp
- ABLLS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn

Varied Levels of Text:

- Multiplication Read Alouds
- Marilyn Burns Math Library List
- EPIC

Teacher Notes / Reflections

Data Literacy	**Duration:** 15 days

Standards/Learning Targets

Focus Standards (Major Standards)

New Jersey Student Learning Standards:

- **5.DL.A.** Understand and analyze data visualizations.
- **5.DL.A.1** Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns.
- **5.DL.A.2** Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video presentation).
- **5.DL.A.3** Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data).
- **5.DL.A.4** Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples.
- **5.DL.B.** Represent and interpret data.
- **5.DL.B.5** Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

Supporting and Additional Standards

- **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions
- **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{5}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad = bc)}{bd}$).
- **5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions

and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.

- **5.NF.B** Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Primary Interdisciplinary Connections

English Language Arts

- **RI.CI.5.2.** Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.
- **RI.MF.5.6.** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.
- **SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

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.
- **5-ESS1-2** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Computer Science and Design Thinking Standards

- **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.
- **8.2.5.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.

Career Readiness, Life Literacies, and Key Skills Standards

- **9.1.5.PB.2:** Describe choices consumers have with money (e.g., save, spend, donate).

- **9.4.5.CI.3:** Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity. .
- **9.4.5.CT.1:** Identify and gather relevant data that will aid in the problem-solving process.
- **9.4.5.IML.3:** Represent the same data in multiple visual formats in order to tell a story about the data.

Evidence of Student Learning

Performance Tasks/Use of Technology

- i-Ready Math in Action
- i-Ready MyPath
- i-Ready Fluency Flight
- IXL
- Standards-based activities and tasks
  - Illustrative Math Tasks - Fifth Grade
  - Math Milestones Tasks - Fifth Grade
  - Math Is Visual videos & Tasks
- Google Slides & Forms
- Digital Review Platforms - Kahoot / Blooket
- Flipgrid
- NCTM Illuminations
- Splash Learn - Games for Kids
- ABCya! - Games for Kids
- Multiplication.com - Games

Assessments

Formative

- Exit slips
- Teacher observations/anecdotal/checklists
- i-Ready games
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative

- i-Ready Mid-Unit Assessments
- i-Ready Unit Assessments
- Digital Comprehension Checks
- Unit & Cumulative Reviews
- LinkIt Progress Monitoring Standard Assessments

Benchmark

- i-Ready Assessments (Fall, Winter, Spring)
- District-wide Common Benchmark Assessments

Alternative

- Performance Tasks
- Extension Projects
- Written/verbal explanations
- Peer assessment
- Self-assessment

	• Untimed Fact Practice Assessment • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	**Skills**
Essential Questions: • How does a line plot help you organize the data we collect? • How do varying data displays highlight different aspects of the data presented? • How can you determine that the data collected is complete or incomplete? • How can you organize the data in a digital display? • How can we use fractional measurements on a line plot to solve real world problems? • How can you use your understanding of operations with fractions to solve problems about data presented in line plots? **Enduring Understandings:** *Students will know… "I can…"* • Understand, represent and interpret line plots to display data sets. • Collect, organize, and represent data of various types from various sources. • Communicate data in a digital display. • Compare data displays to describe and analyze patterns. • Ask questions and interpret data to analyze patterns. • Interpret and analyze data presented.	**Students will be able to:** • Collect and clean data to be analyzed. • Communicate results digitally using appropriate visualizations (i.e. double line plot, double bar graph) • Compare a variety of data displays to describe and analyze patterns. • Create a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8) • Use operations with fractions to solve problems involving information presented in line plots

Instructional Plan	
Suggested Activities	**Resources**
• Connect to Climate Change Activity 6.1.2.Geo.HE.1 Carbon Footprint Activity Engage in a discussion about types of housing and use of power. Create a line plot with students to connect 1 whole to 3 parts (house, townhouse, apartment), and graph results with students. Convert poll into total square ft to see which grouping/Classification has the largest power waste/carbon footprint and how to then reduce • *Zero* by Kathryn Otoshi • *One Grain of Rice: A Mathematical Folktale* by Demi • *Usha and the Big Digger* By Amitha Jagannath Knight • *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca • *My Rows and Piles of Coins* by Tololwa M. Mollel	• Ready Mathematics Program • i-Ready MyPath • IXL • Seesaw • Class Dojo • NJSLS and iRCL 2024 Padlet • Manipulatives by iReady Lessons • Achieve the Core Coherence Map • Multiples Charts • Number Lines • Word Walls • Anchor Charts As appropriate: ○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn Differentiate according to formative assessments and i-Ready Diagnostic individualized path • Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math

	■ Click Grade Level ■ Click REINFORCE and use the resources shown ● Resources for students **approaching** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click RETEACH and use the resources shown ● Resources for students **exceeding** grade level expectations: ○ Log into i-Ready and then follow these steps: ■ Click assess and teach ■ Click Teacher Toolbox Math ■ Click Grade Level ■ Click EXTEND and use the resources shown Useful links / online resources ● How Many Equivalent Fractions? ● How Many Pages? ● Measuring Classroom Objects

Suggested Options for Differentiation
Multilingual Learners ● Simplify written and verbal instructions ● Provide written directions with models and diagrams when possible ● Build in more group work to allow ML students to interact and communicate with peers

- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking

- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Build in more group work to encourage interaction with peers
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Teach study skills

- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Assign peer tutor
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Varied Levels of Text:

- Multiplication Read Alouds
- Marilyn Burns Math Library List
- EPIC

Teacher Notes / Reflections

Geometry	**Duration:** 20 days
Standards/Learning Targets	
Focus Standards (Major Standards)	

- **5.G.A.** Graph points on the coordinate plane to solve real-world and mathematical problems.
- **5.G.A.1** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).
- **5.G.A.2** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- **5.G.B.** Classify two-dimensional figures into categories based on their properties.
- **5.G.B.3** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
- **5.G.B.4** Classify two-dimensional figures in a hierarchy based on properties.

Supporting and Additional Standards

- **5.OA.B.3** Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.
- **5.NF.B.4b** Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

Primary Interdisciplinary Connections

English Language Arts

- **RI.CI.5.2.** Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.

- **RI.MF.5.6.** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the text in which it appears.
- **SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

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.
- **5-ESS1-2** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

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- **8.1.5.DA.1:** Collect, organize, and display data in order to highlight relationships or support a claim.
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Career Readiness, Life Literacies, and Key Skills Standards

- **9.1.5.PB.2:** Describe choices consumers have with money (e.g., save, spend, donate).
- **9.4.5.CI.3:** Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity (e.g., 8.2.5.ED.2, 1.5.5.CR1a).
- **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.3:** Represent the same data in multiple visual formats in order to tell a story about the data.

Evidence of Student Learning

Performance Tasks/Use of Technology	Assessments
• i-Ready Math in Action	**Formative**

• i-Ready MyPath
• i-Ready Fluency Flight
• IXL
• Standards-based activities and tasks
  ○ Illustrative Math Tasks - Fifth Grade
  ○ Math Milestones Tasks - Fifth Grade
  ○ Math Is Visual videos & Tasks
• Google Slides & Forms
• Digital Review Platforms - Kahoot / Blooket
• Flipgrid
• NCTM Illuminations
• Splash Learn - Games for Kids
• ABCya! - Games for Kids
• Multiplication.com - Games
	• Exit slips
	• Teacher observations/anecdotal/checklists
	• i-Ready games
	• Performance Assessments
	• Oral Assessments/Conferencing
	• Portfolio/Math Journals
	• Daily Classwork
	• Pre-assessments
	Summative
	• i-Ready Mid-Unit Assessments
	• i-Ready Unit Assessments
	• Digital Comprehension Checks
	• Unit & Cumulative Reviews
	• LinkIt Progress Monitoring Standard Assessments
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	• i-Ready Assessments (Fall, Winter, Spring)
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	Alternative
	• Performance Tasks
	• Extension Projects
	• Written/verbal explanations
	• Peer assessment
	• Self-assessment
	• Untimed Fact Practice Assessment
	• Project Based Assessments with Scoring Rubric

Knowledge and Skills	
Content	**Skills**
Essential Questions: ● What strategies can you use to identify a point on the coordinate plane? ● What patterns do you notice when traveling in the coordinate plane? ● How can we represent and interpret real-world problems through graphing points on a coordinate plane? ● What attributes help you to classify two-dimensional shapes? ● How can we classify two-dimensional figures to determine their hierarchy? ● How can polygons, triangles, and quadrilaterals be described, classified and named? **Enduring Understandings:** *Students will know… "I can…"* ● Use the x-axis and y-axis appropriately to plot an ordered pair on the coordinate plane. ● Write and graph ordered pairs for a point on the first quadrant of the coordinate plane. ● Interpret the values of the coordinates in context of a real-world situation. ● Create a diagram to demonstrate the hierarchy of two-dimensional figures based on properties.	**Students will be able to:** ● Move from the origin, along the x- and y-axis to plot an ordered pair. ● Locate a given point in the coordinate plane using an ordered pair. ● Graph points in the first quadrant of the coordinate plane to represent real world and mathematical problems. ● Interpret coordinate values of points in the context of the real world and mathematical problems. ● Recognize and describe the attributes belonging to a category of two-dimensional figures that also belong to all subcategories. ● Classify two-dimensional figures in a hierarchy based on properties.

• Describe the attributes of two-dimensional figures and classify them by groups and sub-groups.	
Instructional Plan	
Suggested Activities	**Resources**
• Life-Size Coordinate Plane Use masking tape to create a life-size coordinate grid on the classroom floor. Have students label the origin, x-axis, and y-axis. Pair up students - one will stand on the coordinate plane and the other can identify their partner's location by identifying the ordered pair. Switch places and rotate through partners in the class. You could also use a group of three, the third being the "judge." • *Zero* by Kathryn Otoshi • *One Grain of Rice: A Mathematical Folktale* by Demi • *Usha and the Big Digger* By Amitha Jagannath Knight • *Seven Golden Rings: A Tale of Music and Math* by Rajani Larocca • *My Rows and Piles of Coins* by Tololwa M. Mollel	• Ready Mathematics Program • i-Ready MyPath • IXL • Seesaw • Class Dojo • NJSLS and iRCL 2024 Padlet • Manipulatives by iReady Lessons • Achieve the Core Coherence Map • Multiples Charts • Number Lines • Word Walls • Anchor Charts As appropriate: ○ Boom Cards ○ VB-Mapp ○ ABLLS-R ○ Connecting Math Concepts ○ Prodigy ○ SplashLearn Differentiate according to formative assessments and i-Ready Diagnostic individualized path • Resources for **on-grade** students: ○ Log into i-Ready and then follow these steps:

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Suggested Options for Differentiation	
Multilingual Learners	

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
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Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
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- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
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- Adjusted class schedules or grading.
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Gifted and Talented

- Differentiated assignments/projects/assessments

- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
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- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
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Students In Need of Academic Support:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
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- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
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Teacher Notes / Reflections