Stafford Township School District

Mathematics Curriculum
Grade 3

Adopted: 08/17/2017
Updated: 01/06/2020, 8/03/2021 (enVisions), 09/12/2022 (revised 2020 NJSLS Interdisciplinary Standards)

Statement of Purpose

The New Jersey Student Learning Standards for Mathematics challenges us to ensure focus, coherence, and rigor in our mathematics curriculum across all elementary grade levels. Additionally, through the Standards for Mathematical Practice, students are encouraged to develop the application of math skills while solving real world problems.

To gain a greater focus, the standards place an emphasis on fewer skills, deepening and strengthening the foundations, thus providing students with the knowledge to apply the skills to situations inside and outside of the classroom. Grades 3 – 5 focus on concepts, skills and problem solving related to multiplication and division of whole numbers and fractions. Within our curriculum, focus is maintained by building students' conceptual skills while developing a deeper understanding and real world application.

Coherence is supported by the alignment of the curriculum, instruction, and assessments. The repeated domains, within the standards, progress through the elementary grades to allow for developmentally appropriate attainment of learning outcomes. The curriculum's suggested pacing allows for the important balance of developing conceptual understanding and procedural skills. Instructional decisions are guided by the use of Board approved resources, problem-based learning and real-world applications that incorporate technology and the 21st century skills.

Rigor, as addressed in the standards, has three main components: conceptual understanding, procedural skills and fluency, and application. The curriculum has been designed with this in mind; there is a progression of skills that guide students from the conceptual phase to the application component. Each understanding of the concepts applies to a relevant, real world experience. The Standards for Mathematical Practice guide educators in helping students develop "processes and proficiencies" through problem solving, reasoning and proof, communication, representations, and connections, adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition. From these standards, each instructional cycle focuses on a few to enable students to develop deeper understanding.

The Standards for Mathematical Practice describe ways in which developing student practitioners, of the discipline of mathematics, increasingly promote engagement with the subject matter as they grow in mathematical maturity and expertise. This is supported through the scope and sequence of the curriculum.

Primary Interdisciplinary Connections: Science, Social Studies, Language Arts, Technology, and 21st Century Life and Careers. For further clarification see New Jersey Student Learning Standards at http://www.nj.gov/education/cccs/

21st Century Themes: Through instruction in life and career skills, all students acquire the knowledge and skills needed to prepare for life as citizens and workers in the 21st century. For further clarification see http://www.nj.gov/education/aps/cccs/career/

Grade 3 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division
- Understand properties of multiplication and the relationship between multiplication and division
- Multiply and divide within 100
- Solve problems involving the four operations, and identify and explain patterns in arithmetic

Number and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic

Number and Operations- Fractions

- Develop understanding of fractions as numbers

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
- Represent and interpret data
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

Geometry

- Reason with shapes and their attributes

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Supporting Mathematical Practices through Questioning

Practice 1: Make sense of problems and persevere in solving them	● What is the problem asking? ● How will you use that information? ● What other information do you need? ● Why did you choose that operation? ● What is another way to solve that problem? ● What did you do first? Why? ● What can you do if you don't know how to solve a problem? ● Have you solved a problem like this one? ● When did you realize your first method would not work? ● How do you know your answer makes sense?
Practice 2: Reason abstractly and quantitatively	● What is a situation that could be represented by this equation? ● What operation did you use to represent the situation ● Why does that operation represent the situation? ● What properties did you use to find the answer? ● How do you know the answer is reasonable?
Practice 3: Construct viable arguments and critique the reasoning of others	● Will that method always work? ● How do you know? ● What do you think about what the other student said? ● Who can tell us about a different method? ● What do you think will happen if …? ● When would that not be true? ● Why do you agree/disagree with what the other student said? ● What do you want to ask the other student about that method? ● How does that drawing support your work?
Practice 4: Model with mathematics	● Why is that a good model for this problem? ● How can you use a simpler problem to help you find the answer? ● What conclusions can you make from your model? ● How would you change your model if…?
Practice 5: Use appropriate tools strategically	● What could you use to help you solve the problem? ● What strategy could you use to make the calculation easier? ● How would estimation help you solve that problem?

	• Why did you decide to use…?
Practice 6: Attend to precision	• How do you know your answer is reasonable? • How can you use math vocabulary in your answer? • How do you know those answers are equivalent? • What does that mean?
Practice 7: Look for and make use of structure	• How did you discover the pattern? • What other patterns can you find? • What rule did you use to make this group? • Why can you use that property in this problem? • How is that like…?
Practice 8: Look for and express regularity in repeated reasoning	• What do you remember about…? • What happens when…? • What if you...instead of…? • What might be a shortcut for…?

Mathematical Practices Rubric

Mathematical Practice	4	3	2	1
MP #1	Made sense of problems, evaluated approaches, and persevere in solving them.	Make sense of problems and persevere in solving them.	Made sense of problems.	With support, made sense of problems.
MP #2	Dug deeply into a problem to analyze and reason abstractly and quantitatively.	Reasoned abstractly and quantitatively.	Represented a complex problem mathematically.	Represented a basic problem mathematically.
MP #3	Analyzed situations, breaking them into cases and building a logical argument with counter-examples. Communicated ideas and responded to others. Provided critique and feedback to others.	Construct viable arguments and critique the reasoning of others.	Constructed viable arguments.	Compared arguments.
MP #4	Analyzed complex relationships mathematically to solve problems.	Made assumptions and approximations to simplify complex problems.	Applied reasoning to plan an event or solve a problem.	Wrote an equation to describe a situation.
MP #5	Used appropriate tools strategically to solve problems and display solutions.	Used appropriate tools strategically.	Identified available tools to solve a problem and when to use them.	Identified available tools to solve a problem.
MP #6	Attends to precision and details when calculating and communicating. Examined details of claims and made explicit use of definitions.	Attends to precision and details when calculating and communicating.	Where accurate when calculating and communicating.	Where clear when calculating and communicating.

MP #7	Recognized complex patterns and could see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. Applied patterns to solve problems.	Recognized complex patterns and used those to solve problems.	Recognized complex patterns.	Recognized patterns.
MP #8	Maintained oversight of the whole process while paying attention to details. Continued to evaluate the reasonableness of intermediate results.	Looked for and expressed regularity in repeated reasoning. Found general methods or shortcuts.	Found methods that can be used in multiple applications.	Identified efficient methods in solving some problems.

Unit 1: Operations and Algebraic Thinking	Topics: 1-5; 11 Duration: September - December, March 53 days
Standards	
A.	**Represent and solve problems involving multiplication and division**
3.OA.1	Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe and/or represent a context in which a total number of objects can be expressed as 5 × 7.
3.OA.2	Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.
3.OA.3	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
3.OA.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = ÷ 3, 6 × 6 = ?.
B.	**Understand properties of multiplication and the relationship between multiplication and division.**
3.OA.5	Apply properties of operations as strategies to multiply and divide.2 Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)
3.OA.6	Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.
C.	**Multiply and divide within 100.**
3.OA.7	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
D.	**Solve problems involving the four operations, and identify and explain patterns in arithmetic.**
3.OA.8	Solve two-step word problems using the four operations. 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

3.OA.9	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.
	Primary Interdisciplinary Connections
	ELA Standards
SL.3.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
SL.3.1.B	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
	Career Readiness, Life Literacies and Key Skills
	This outlines concepts and skills necessary for New Jersey's students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy. https://www.nj.gov/education/standards/clicks/index.shtml **9.1 Personal Financial Literacy** This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers. **9.2 Career Awareness** This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements. **9.3 Career and Technical Education** This standard outlines what students should know and be able to do upon completion of a CTE Program of Study. **9.4 Life Literacies and Key Skills** This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy. • 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors. • 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes. • 9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements

	● 9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6). ● 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.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1). ● 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. ● 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). ● 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
	Computer Science and Design Thinking Standards (Technology)
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of the data.
8.1.5.DA.5	Propose cause and effect relationships, predict outcomes, or communicate ideas using data.
8.1.5.IC.1	Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.
8.1.5.IC.2	Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.

Essential Understandings *Students will understand that...*	**Essential Questions**
● The four basic arithmetic operations are interrelated, and the properties of each may be used to understand the others. ● Mathematical concepts can be understood using a variety of models. ● Numbers are able to represent quantity, position, location, and relationships, and symbols may be used to express these relationships. ● Some real-world problems that involve joining or separating equal groups or making comparisons can be solved using multiplication. Repeated addition, number line, arrays, bar diagrams and equal groups are all	● How can thinking about equal groups help you understand the connection between multiplication and division? ● How can I use what I know about equal groups to help multiply numbers? ● How can you use known multiplication facts to solve unknown facts? ● How can you use known multiplication facts to find unknown division facts? How are multiplication and division related? ● What are strategies to solve multiplication and division facts? ● What are ways to solve 2-step problems?

ways to think about multiplication. Strategies such as using properties of operations, drawings, and skip counting can be used to multiply. ● Good math thinkers know how to pick the right tools to solve math problems, and think of ways to solve them. They look for things that repeat, see relationships and make generalizations. ● Sharing involves separating equal groups and repeated subtraction are ways to think about division. ● There are patterns in the factors and products for multiplication. Good math thinkers can use these patterns to solve multiplication problems. ● The Distributive property can be used to break apart a larger array into smaller arrays. Basic multiplication facts can be found by breaking apart unknown facts into known facts to get a final product. ● Three or more numbers can be grouped and multiplied in any order. ● Multiplication and division have an inverse relationship that can be used to find unknown facts. Factors and products can be identified by patterns as well as other characteristics, such as even and odd. ● Any number (except 0) divided by itself is equal to 1. Any number divided by 1 is that number. Zero divided by any number (except 0) is 0. Zero cannot be a divisor. ● Division problems can be thought of as a missing factor multiplication. ● Bar diagrams show relationships in a two- step word problem and help identify the operation or operations needed to solve the problem. The way quantities in a two-step problem are related determines the operations used to solve the problem. Equations show these relationships.	
Evidence of Student Learning	

Performance Tasks: *Activities to provide evidence for student learning of content and cognitive skills.*	**Other Assessments**
<u>5k for a Charity</u> ● Students will decide on a charity and a target goal to plan a 5k ● Estimate the number of participants and registration cost needed in order to reach their goal. ● Estimate the number and cost of T-shirts needed for each participant for the run and deduct that from their total earnings ● Decide on the number of volunteers needed to work the race ● Determine the age brackets and time for each race ● Estimate the number of water bottles and cost needed to provide the participants ● Map out 3.1 kilometers route that will be taken for the run **<u>Vacation Budget</u>** You are planning a vacation to Washington D.C. for the weekend for you and a friend. You will be there for 3 days and 2 nights. ● Students must decide the cost of the vacation (hotel, food, travel, tourist attractions). ● Students must create a full detailed itinerary for their weekend trip. ● Students must research and describe the tourist attractions they plan to visit	**Formative Assessments** ● Teacher Observation ● Performance Assessments ● Exit Slips ● Games ● Anecdotal Records ● Oral Assessments/Conferencing ● Portfolio/Math Journals ● Daily Classwork ● Pre-assessments ● iReady Math Assessments ● enVision Topic Performance Assessments **Summative Assessments** ● Tests ● Quizzes ● National/State/District Wide Assessments ● BOY Benchmark ● enVision Topic Assessments **Benchmark Assessment** ● enVision Benchmark Assessment **Alternative Assessments** ● Untimed Fact Practice Assessment ● Manipulative Driven Assessment ● Modified/Teacher Created Chapter Tests ● Modified/Teacher Created Mid-Chapter Quiz ● Visual Representation of Skills Assess ● Modified Classwork Assignments ● Modified Benchmarks ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Mathematical Practice	

MP1: Make sense of Problems and Persevere in Solving Them
MP 4: Model with Mathematics
MP 6: Attend to precision
MP 7: Look for and Make use of Structure

Vocabulary

Equal groups, multiplication, factors, product, equations, unknown, number line, arrays, rows, columns, Commutative Property of Multiplication, division, multiples, Identity (one) Property of Multiplication, Zero Property of Multiplication, Distributive Property, Associative Property of Multiplication, fact family, dividend, divisor, quotient, even, odd

Knowledge and Skills

Content	**Skills**
Cluster: ● Represent and solve problems involving multiplication and division ● Understand properties of multiplication and the relationship between multiplication and division ● Multiply and divide within 100 ● Solve problems involving the four operations, and identify and explain patterns in arithmetic *Students will know…* ● Many situations in daily life can be modeled with multiplication and division ● Problem solving in daily life may include unknown variables that impact outcomes ● Patterns exist in the relationship of multiplication and division	*Students will be able to …* ● Interpret products of whole numbers. ● Interpret whole number quotients. ● Use multiplication and division to solve word problems. ● Determine the unknown whole number in an equation of three whole numbers. ● Apply properties of operations to multiply and divide memorize all products of two single-digit numbers. ● Solve two step word problems using four operations and solving for the unknown. ● Identify patterns in arithmetic. ● Identify multiplication patterns including on a times table ● Represent multiplication with objects, diagrams, pictorial representations, and arrays ● Solve and write simple number sentences and word problems involving multiplication ● Understand multiplication as repeated addition and joining of equivalent sets Identify when to use multiplication ● Understand multiples (skip counting) and its connection to multiplication ● Recall basic facts for all products (0 x 0 to 9 x 9) Multiply one-digit whole numbers by multiples of 10 (example: 9 × 70) ● Multiply a two-digit number by a one-digit number using a variety of strategies ● Apply properties of operations (commutative, associative, and distributive) to multiply

	● Separate a group into equal sets
	● Use models to demonstrate division Solve division problems without remainders up to 100
	● Recall basic facts for division using a variety of strategies
	● Solve unknown factor division problems using multiplication
	● Determine when to use division in a problem
	● Use various strategies for division to solve problems
	● Show division as an inverse operation of multiplication
	● Construct fact families
	● Solve division problems using pictures, numbers, and words
	● Use the problem solving process to identify:
	  ● What are the facts
	  ● What is the question
	  ● What can we eliminate
	  ● Choose a strategy and solve
	  ● Does the answer make sense
	● Choose a strategy to solve a problem:
	  ● Picture Models
	  ● Arrays
	  ● Open Number Lines
	  ● Bar Models (Tape Diagrams)
	  ● Choose an operation
	  ● Guess and Check
	  ● Make a table or an organized list
	  ● Use logical reasoning
	  ● Look for a Pattern
	● Communicate mathematical thinking through oral and written language and explain and justify answers
	● Use a letter or symbol to stand for an unknown quantity in a two-step word problem.
	● Use mental math strategies to assess the reasonableness of an answer.
	● Use rounding as an estimation strategy

Instructional Plan	
Suggested Activities	**Resources**

Multiplication War Card Game - Players flip 2 cards and multiply. Player with the higher product wins the hand. Player with most cards at the is the winner	Playing cards
Baseball Multiplication - Batter rolls 2 dice and multiplies the numbers. Batter moves along the baseball diamond depending on the product. Runs are scored when a batter reaches home plate	Everyday Math Baseball Multiplication Template
Multiplication Bingo - Using a bingo board students put 24 different products on their board. Teacher draws 2 playing cards to create a product. If students have the product they mark it on their boards, 1st person to get 5 across/down/or diagonally wins.	Bingo board (or any 5 by 5 graph), Number playing cards, and markers (chips)
Multiplication apps - Various multiplication apps such as Monkey Multiplication, multiplication sushi, multiplication bubbles, etc.	iPads/Chromebooks
Students will pretend to be the teacher and create a graphic organizer that relates multiplication and addition, and addition and subtraction. Students will then present their graphic organizer to the class and the class will decide which one they will use as a reference.	Anchor chart paper, markers
Measuring Up - Students will read a short story and recipe called "Stone Soup." Students will be asked questions and solve multiplication word problems to find out how many of the ingredients are needed.	Measuring Up Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_measuring_up_levela_student_2021.pdf
Party Time - Students will solve multiplication problems to determine the total number of guests invited to the party.	Party Time Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_party_time_levela_student_2021.pdf
The Wheel Shop - Students will use problem solving to find an unknown number in a multiplication problem.	The Wheel Shop Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_the_wheel_shop_levela_student_2021.pdf
Tri-Trangles - Students will find the number of toothpicks that make up each pattern using multiplication and solving word problems.	Tri-Triangles Level A Activity: https://www.insidemathematics.org/inside-problem-solving/tri-triangles

enVision Topic 1 "Pick A Project" Choice Activities - Students will choose a project to help students understand multiplication and division of whole numbers. ● *Project 1A - Tall Buildings:* Students will create a poster showing how they can construct their own building. ● *Project 1B - Juno and Jupiter:* Students will build a model space probe with wings of solar panels and use multiplication to describe how many wings on the probe. ● *Project 1C - Around the Block:* Students will draw a picture of a neighborhood and use multiplication and division to describe the blocks of the neighborhood.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 1A: construction paper, scissors, tape, or glue ● Project 1B: poster paper or construction paper, scissors, tape or glue ● Project 1C: straightedge, crayons or markers
enVision Topic 2 "Pick A Project" Choice Activities - Students will choose a project to practice multiplication facts using patterns. ● *Project 2A - Clocks:* Students will design a clock tower and use skip counting to label the clock. ● *Project 2B - Baseball and Softball:* Students will make a poster or write a report about baseball or softball and write an equation to find the total number of teams in a tournament. ● *Project 2C - Daytona 500:* Students will plan a Nascar race and create a poster showing how many drivers and pit crew members are needed using multiplication. Students will also use multiplication to find out how many miles each driver will have driven after each lap. ● *Project 2D - Fundraisers:* Students will create a report and use multiplication to show how much money will be received for selling different items at a fundraiser.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 2A: construction paper, scissors, markers, ruler ● Project 2B: construction paper, markers, ruler ● Project 2C: construction paper ● Project 2D: paper, pencil
enVision Topic 3 "Pick A Project" Choice Activities - Students will choose a project to practice multiplication facts for 3, 4, 6, 7, and 8. ● *Project 3A - Basketball:* Students will make a tally table and use multiplication to find the total number of the basketball shots made. ● *Project 3B - Beachcombing for Seashells:* Students will draw a poster and use the Distributive Property of	enVision Pick a Project Descriptions and Materials (listed below): ● Project 3A: paper, garbage can, tape ● Project 3B: poster board, markers, or crayons ● Project 3C: paper, pencil

Multiplication to write a multiplication problem to find the total number of each type of shell on the poster. ● *Project 3C - Congress and the Presidency:* Students will write a report about a president and their important achievements and use multiplication to determine the number of years that each president served in office.	
enVision Topic 4 "Pick A Project" Choice Activities - Students will choose a project to practice using multiplication to divide and practice division facts. ● *Project 4A - Uniform Numbers:* Students will make a poster and write equations by multiplying an odd number by an even number and explain any patterns noticed. ● *Project 4B - Money:* Students will write a report and create a picture showing how many different ways there are to make $20 when using paper currency and multiplication equations. ● *Project 4C - Close Counts in Horseshoes:* Students will create a score sheet and use multiplication equations to determine the total points that can be scored in the game with different points options. ● *Project 4D - Let's Play!:* Students will develop a game and write multiplication equations to help players each points for the cards they have.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 4A: paper, pencils ● Project 4B: paper, pencils, colored pencils ● Project 4C: paper, pencils ● Project 4D: poster board, paper, pencils, scissors
enVision Topic 5 "Pick A Project" Choice Activities - Students will choose a project to practice multiplying and dividing fluently within 100. ● *Project 5A - Go By the Book:* Students will design a data table to show the number of books on each shelf in the library by following the guidelines. ● *Project 5B - Roll of the Cube:* Students will create a game about multiplication using number cubes. ● *Project 5C - Three Wheeling!:* Students will create a chart to show the total number of wheels at each location and write division equations to show this data.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 5A: paper, pencils ● Project 5B: number cubes, paper, pencils ● Project 5C: paper, pencil

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<tr>
<td>enVision Topic 11 “Pick A Project” Choice Activities -
Students will choose a project to practice using operations with whole numbers to solve problems.
● Project 11A - Come Sale Away!: Students will write and perform a skit about a sale and how much money customers are spending and saving.
● Project 11B - Count on the Grapefruit: Students will create a poster about citrus groves to explain what fruit was picked, the total amount of fruit, and how much is in each basket.
● Project 11C - Lemonade Stand: Students will perform and write a song about lemonade by including information about estimating the total amount from sales and estimating the number of drinks sold.</td>
<td>enVision Pick a Project Descriptions and Materials (listed below):
● Project 11A: poster board, markers
● Project 11B: number cube, poster board, markers
● Project 11C: paper, pencil</td>
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<tr>
<td colspan="2">Math Literature</td>
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<tr>
<td colspan="2">Textbook: enVision Mathematics Common Core, Savvas Learning Company LLC., 2020
Multiplication:
● Hershey’s Kisses by Jerry Pollatta
● Anno’s Mysterious Multiplying Jar by Massaichiro Anno and Mitsumasa Anno
● 2 x 2 = Boo! A Set of Spooky Multiplication Stories by Loreen Leedy
● The Best of Times by Greg Tang
● Multiplication Meltdown by Lisa Arias
● Multiplication Master by Lisa Arias
● Multiplication by Ann Becker
Division:
● Safari Park by Stuart Murphy
● The Doorbell Rang by Pat Hutchings
● Divide and Ride by Stuart J. Murphy
● The Great Divide: A Mathematical Marathon by Dayle Ann Dodds
● Dive Into Division by Lisa Arias
● Division by Any Becker
Two-Step Word Problems:
● Math Curse by Jon Scieszka
● You Can, Toucan, Math: Word Problems - Solving Fun by David A. Alder
● Beginner Word Problems by Minta Berry</td>
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<td colspan="2">Websites</td>
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https://www.funbrain.com/math/	Fun Brain - Basic Multiplication and Division Facts
http://www.factmonster.com/mathmoney.html	Fact Monster - Basic Multiplication and Division Facts
https://prodigygame.com	Prodigy - Standard-Based Learning Game
http://mathwire.com/	Mathwire - Offers games and activities on multiplication and division concepts
https://www.flocabulary.com/subjects/math/	Flocabulary - Educational Hip-Hop Songs and Videos ● Related Videos/Activities: Multiply 0-12 (video for each number), Multiplication Challenge Rap, Divide by 0-12 (video for each number), Division Challenge Rap, Skip Counting
https://login.i-ready.com/	iReady Assessments & Individualized Lessons
https://www.mathplayground.com/grade_3_games.html	Math Playground - Standards Based Learning Games
https://www.iknowit.com/third-grade.html	I Know It! - Standards Based Learning Games
https://www.ixl.com/math/grade-3	IXL - Skill Based Learning Games
https://www.brainpop.com/math/	BrainPop - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Multiplication, Division, Commutative Property, Distributive Property, Associative Property
https://jr.brainpop.com/math/	BrainPop Jr. - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Arrays, Making Equal Groups, Multiplying by 0 and 1, Repeated Addition, Repeated Subtraction, Patterns, Solving Word Problems
https://www.abcya.com/standards/	ABCYA - Standards Based Learning Games
https://home.xtramath.org/	XtraMath - Skill Based Learning Games
https://www.khanacademy.org/math/cc-third-grade-math	Khan Academy - Skill Based Learning Videos & Practice Activities
https://www.mathgames.com/grade3	Math Games - Skill Based Learning Games
https://www.savvas.com/index.cfm?locator=PS38Dv	enVision Math - Textbook Resources
https://media.pk12ls.com/curriculum/math/envisionk5games/index.html#/Grade:3/	enVision Student Games ● Fluency: Multiply and Divide within 1,000 ● Cosmic Caravan: Arrays and Multiplication ● Save the Word: Vocabulary Words with Definitions

https://media.pk12ls.com/curriculum/math/Tools/MTindex.html	enVision Digital Math Tools & Manipulatives

Accommodations & Modifications

Basic Skills

- Use of enVision Math Diagnosis and Intervention System and materials
- Use of a Multiplication table
- Intensive Intervention
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Provide manipulatives or the opportunity to draw solution strategies
- Keep in mind learner's multi-sensory, visual, and auditory style and teach lessons using incorporating those learning styles
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Economically Disadvantaged

- Use of a Multiplication table
- Intensive Intervention
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with materials to support lessons, such as, manipulatives and support for home connections

English Language Learners

- Use of a Multiplication table
- Bilingual Math Boards
- enVision Language Support Handbook
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Use peer groupings and supports

Gifted & Talented

- Use of higher order thinking questions
- Expose Students to Higher Level Vocabulary Based on Lesson Skills
- Provide students who successfully complete class assignments on the first try additional challenge problems

- Provide students with choice activities and choice boards that relate to the skills of the lesson to continue to extend student learning
- Provide students with enrichment activities, such as enVision Enrichment Practice pages for each lesson

Students with IEPs

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Shorten assignments to focus on mastery of skill and quality over quantity
- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students with 504 plan

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Shorten assignments to focus on mastery of skill and quality over quantity
- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students at Risk for Failure

- Pair with adult mentor or buddy
- Be flexible with assignments
- Offer several alternatives from which all students can choose

- Use visuals
- Introduce key vocabulary before lesson
- Provide peer tutoring
- chants, songs
- preferential seating

Unit 2: Measurement and Data	Topics 6-7, 14 & 15; Duration: December - January, April - May, 39 Days
Standards	
A.	**Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.**
3.MD.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
3.MD.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
B.	**Represent and interpret data.**
3.MD.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets
3.MD.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.
C.	**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**
3.MD.5	Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
3.MD.6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and nonstandard units).
3.MD.7	Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

D.	**Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.**
3.MD.8	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
	Interdisciplinary Connections
	ELA Standards
SL.3.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
SL.3.1.B	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
	Career Readiness, Life Literacies and Key Skills
	This outlines concepts and skills necessary for New Jersey's students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy. https://www.nj.gov/education/standards/clicks/index.shtml **9.1 Personal Financial Literacy** This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers. **9.2 Career Awareness** This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements. **9.3 Career and Technical Education** This standard outlines what students should know and be able to do upon completion of a CTE Program of Study. **9.4 Life Literacies and Key Skills** This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy. • 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors. • 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.

	● 9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements ● 9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6). ● 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.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1). ● 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. ● 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). ● 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
Computer Science and Design Thinking Standards (Technology)	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of the data.
8.1.5.DA.5	Propose cause and effect relationships, predict outcomes, or communicate ideas using 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.

Essential Understandings *Students will understand that...*	**Essential Questions**
● Time measurement is a means to organize and structure each day and our lives. Clocks can be used to tell time to the nearest minute. Elapsed time can be found by finding the total amount of time that has passed between a start and end time. Time intervals can be added or subtracted to solve problems. ● Collection and use of data provides better understanding of people and the world. ● Measurements can be used to describe, compare, and make sense of phenomena.	● How does area connect to multiplication and division? ● How can data be represented, analyzed, and interpreted? ● How can time, capacity, and mass be measured and found? ● How can perimeter be measured and found?

<table>
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- Benchmarks can be used to estimate capacity (liquid volume) which is the measure of the amount of liquid a container can hold.
- Mass is a measure of the quantity of matter in an object. Problems involving mass and volume can be solved with a picture or a diagram.
- The amount of space inside a shape is it's area. Area can be found by counting unit squares or by multiplying the side lengths. Area can be measured using nonstandard units, including unit squares of different sizes and by standard measurement units to consistently communicate measurements.
- The areas of rectangles can be used to model the distributive property. The area of some irregular shapes can be found by dividing the original shape into rectangles and adding up all of the areas found.
- The distance around a figure is its perimeter. To find the perimeter of a polygon, add the lengths of the sides. Polygons with the same perimeter may have different areas. Polygons with the same area may have different perimeters.
- Good math thinkers look for relationships in math to help solve problems and are careful about what they write and say so that their ideas about math are clear. They know how to think about words and numbers to solve problems.
- The type of graph used is based on the data being presented. Picture graphs and bar graphs make it easy to compare data. Some problems can be solved by making, reading, and analyzing a graph.

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<tr><td colspan="2">Evidence of Student Learning</td></tr>
<tr><td>Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills.</td><td>Other Assessments</td></tr>
<tr><td><u>Creating a Zoo Habitats</u></td><td>Formative Assessments
● Teacher Observation
● Performance Assessments</td></tr>
</table>

Objective: You are an assistant that works with threatened and endangered animals at the zoo, your first job is to collect data and plan living spaces for different animals.

- Research endangered/threatened zoo animals that could be represented in their zoo.
- Research their weight, lengths, heights, and masses
- Categorize the zoo animals based on mammals, reptiles, amphibians, birds, & fish and their subcategories.
- Design the proper habitat for each of the animals based on area and perimeter.
- Create a zone in the zoo based on each animal class
- Design a zoo map guide that represents their zoo's layout.

- Exit Slips
- Games
- Anecdotal Records
- Oral Assessments/Conferencing
- Portfolio/Math Journals Daily
- Classwork
- Pre-assessments
- iReady Math Assessments
- enVision Topic Performance Assessments

Summative Assessments

- Tests
- Quizzes
- National/State/District Wide Assessments
- enVision Topic Assessments

Benchmark Assessment

- enVision Benchmark Assessment

Alternative Assessments

- Untimed Fact Practice Assessment
- Manipulative Driven Assessment
- Modified/Teacher Created Chapter Tests
- Modified/Teacher Created Mid-Chapter Quiz
- Visual Representation of Skills Assess
- Modified Classwork Assignments
- Modified Benchmarks
- Reteach Activities and Worksheets
- Project Based Assessments with Scoring Rubric

Mathematical Practices

MP 2: Reason Abstractly and Quantitatively
MP 5: Use appropriate tools strategically
MP6: Attend to Precision

Vocabulary

area, unit square, square unit, estimate, data, scaled picture graph, scale, scaled bar graph, key, frequency table, survey, elapsed time, A.M., P.M., time interval, capacity (liquid volume), liter (L), mass, gram (g), kilogram (kg), perimeter, equilateral triangle

Knowledge and Skills	
Content	**Skills**
Cluster: ● Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects ● Represent and interpret data ● Geometric measurement: understand concepts of area and relate area to multiplication and to addition ● Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures *Students will know…* ● Time increments on analog and digital clocks ● Data can be displayed using various types of graphs to organize and explain information ● Lengths can be measured to describe countless objects	*Students will be able to …* ● Tell and write time to the nearest minute and measure time intervals ● Solve word problems involving addition and subtraction of time intervals in minutes ● Interpret and represent data by solving 1 step and 2 step word problems based on information presented in graphs ● Measure lengths indirectly and by repeating length units ● Estimate, compare and measure ounces, pounds, grams and kilograms ● Estimate, compare, and measure degrees in Fahrenheit ● Estimate, compare, and measure cups, pints, quarts, gallons, milliliters, liters ● Solve one-step problems with the same unit of measurement ● Choose appropriate units of measurement to solve real life problems ● Express time using quarter after, quarter of, half past, before and after, A.M. and P.M. ● Calculate elapsed time within an hour and over more than an hour ● Find the perimeter of any given polygon by adding the sides with standard units ● Find area of rectangles using manipulatives or counting by squares in an array ● Describe and identify rectangles with the same perimeter and different areas or with the same area and different perimeters ● Understand and apply multiplication and addition to determine areas of rectangles ● Decompose shapes to find area using the distributive property

	• Estimate, count and use appropriate units to find perimeter and area of figures and real world objects • Gather, organize and interpret data from a variety of sources • Discuss data collected and determine appropriate ways to display data • Organize, create and display data using bar graphs, charts/table, pictographs, and line plots • Create and interpret keys/legends • Estimate, compare, and measure half- inches, quarter inches, inches, feet, yards, centimeters, meters • Display data from measuring lengths with precision to ½ or ¼ inch on a ruler
Instructional Plan	
Suggested Activities	**Resources**
Students will collect data from classmates and create a graph to represent the findings.	Graph paper, pencils, crayons, colored pencils
Students will collect data from a group of objects and organize it into a table. Then transfer the information from the table to a graph.	Paper, pencils, and objects being used
Students will find the area and perimeter of the students' first and/or last name using graph paper.	graph paper, crayons, colored pencils, etc.
Students with using the game Minecraft students will work with a partner to create assigned areas and perimeters of rectangles and squares with the use of the tools	Intermediate Mac Lab/Computer Lab Minecraft servers
Students will pretend they are architects and design their ¨dream home¨ using grid paper. Each student must have bedrooms, bathrooms, living room, dining room, kitchen, front yard, and backyard. After students draw it out, they will identify the area and perimeter of each room on a separate sheet of paper.	Grid paper, crayons
Once Upon A Time - Students will measure time intervals using clocks to solve word problems.	Once Upon A Time Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_once_upon_a_time_levela_student_2021.pdf

Polly Gone - Students will use 40 cubes to create an animal pen with the largest area.	Polly Gone Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_polly_gone_levela_student_2021.pdf
Surrounded and Covered - Students will use a given number of squares to create rectangles with different perimeters.	Surrounded and Covered Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_surrounded_and_covered_levela_student_2021.pdf
Boxing the Pots - Students will solve real life problems using units of measurement.	Boxing the Pots Activity: https://www.insidemathematics.org/sites/default/files/materials/boxing%20the%20pots.pdf
Garden Design - Students will compare areas of gardens and practice drawing rectangles with a given area.	Garden Design Activity: https://www.insidemathematics.org/sites/default/files/materials/garden%20design.pdf
enVision Topic 6 "Pick A Project" Choice Activities - Students will choose a project to practice connecting area to multiplication and addition. ● *Project 6A - City Planning:* Students will plan a dog park and write the measurements of each side of the fence and the area inside. ● *Project 6B - Community Gardens:* Students will design a community garden diagram and write the measurements and area of each section within the garden. ● *Project 6C - Carpentry:* Students will draw a blueprint for a new school floor plan and show how the 7 classrooms will be arranged with the given dimensions. Students will also find the area of each room. ● *Project 6D - Card Games:* Students will make an area game using number cubes. Students will give measurements of an area and create the rest of their rules using area as their focus.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 6A: paper, pencil, crayons or markers ● Project 6B: paper, pencil ● Project 6C: paper, pencil ● Project 6D: number cubes, pencil, paper

enVision Topic 7 "Pick A Project" Choice Activities - Students will choose a project to practice representing and interpreting data. ● *Project 7A - How Do They Make a Book?:* Students will create a frequency table or picture graph to record the number of letters in the first 20 words on a page in a book. ● *Project 7B - The Population:* Students will make a bar graph to show the findings from a survey the student completed about how many of the largest cities in the state students have visited. ● *Project 7C - Pet Personality:* Students will create a picture graph to show the number of different kinds of pets the students in the class have.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 7A: paper, pencil, newspaper or magazines, books ● Project 7B: paper, pencil ● Project 7C: paper, pencil
enVision Topic 14 "Pick A Project" Choice Activities - Students will choose a project to practice time, capacity, and mass problems. ● *Project 14A - Clock for the Ages:* Students will write and tell a story about time. ● *Project 14B - What's the Plan?:* Students will create and play a matching game. ● *Project 14C - Dial Up the Time:* Students will design and make a sundial. ● *Project 14D - What a Mass!:* Students will perform a song about the masses of objects.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 14A: blank clock faces, number cubes ● Project 14B: blank clock faces, scissors, construction paper ● Project 14C: construction paper, scissors, glue ● Project 14D: classroom objects of varying masses
enVision Topic 16 "Pick A Project" Choice Activities - Students will choose a project to solve perimeter problems. ● *Project 16A - Sugarcane Crops:* Students will design a sugarcane field and design the perimeter of the six sided field. ● *Project 16B - Interior Design:* Students will collect perimeter data on common objects. ● *Project 16C - Building Builder:* Students will create a perimeter game.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 16A: paper, pencil, number cubes ● Project 16B: rulers ● Project 16C: paper, pencil ● Project 16D: paper, pencil

● *Project 16D - Reverse That Table:* Students will create a poster for a restaurant seating chart and describe the area and perimeter of each table and how they will fit.	

Math Literature

Textbook: *enVision Mathematics Common Core*, Savvas Learning Company LLC., 2020

Time:

- *Clocks and More Clocks* by Pat Hutchings
- *Telling Time with Big Mama Cat* by Dan Harper
- *Get Up and Go!* by Stuart Murphy
- *A Second, a Minute, a Week With Days In It* by Brian P. Cleary

Graphing:

- *The Best Vacation Ever!* by Stuart Murphy
- *Lemonade for Sale* by Stuart Murphy
- *Tiger Math: Learning to Graph from a Baby Tiger* by Ann Whitehead Nagda
- *The Great Graph Contest* by Loreen Leedy
- *Sir Cumference and the Off-the-Charts Dessert* by Cindy Neuschwander

Measurement:

- *How Big is a Foot?* by Rolf Myller
- *Millions to Measure* by David Schwartz
- *Measuring Penny* by Loreen Leedy
- *Marvelous Measurement* by Lisa Arias

Data:

- *A Million Fish…More or Less* by Patricia C. McKissack
- *Understanding Data Visualizations* by Tyler Hoff
- *Data In Arguments* by Jennifer Colby
- *Creating Data Visualizations* by Kristin Fontichiaro

Capacity/Weight:

- *On a Scale, a Weighty Tale* by Brian P. Cleary
- *Measuring Weight* by Julia Vogel
- *Measuring Weight* by Beth Bence Reinke

Area and Perimeter:

- *Spaghetti and Meatballs for All* by Marilyn Burns
- *Perimeter, Area, and Volume: A Monster Book of Dimensions* by David A. Adler
- *All About Area* by Claire Piddock
- *Math Concepts Made Easy: Area* by Marsha Arvoy, Dorianne Nardi

• *Perimeter* by Minta Berry	
Websites	
http://nces.ed.gov/nceskids/createagraph/default.aspx	NCES (National Center for Educational Statistics) - Picture Graphs and Bar Graphs
http://www.studyisland.com/	Study Island - Study Skills
https://www.flocabulary.com/subjects/math/	Flocabulary - Educational Hip-Hop Songs and Videos • Related Videos/Activities: Telling Time to the Hour and Half Hour, Telling Time to Five Minutes, What is Data?, Area and Perimeter, Capacity & Weight, Elapsed Time, Line Plots, Bar Graphs
https://prodigygame.com	Prodigy - Standard-Based Learning Game
https://www.mathplayground.com/grade_3_games.html	Math Playground - Standards Based Learning Games
https://www.iknowit.com/third-grade.html	I Know It! - Standards Based Learning Games
https://www.ixl.com/math/grade-3	IXL - Skill Based Learning Games
https://www.brainpop.com/math/	BrainPop - Educational Math Videos & Skill Based Activities • Related Videos/Activities: Customary Units, Metric vs. Customary, Metric Units, Graphs
https://jr.brainpop.com/math/	BrainPop Jr. - Educational Math Videos & Skill Based Activities • Related Videos/Activities: Area, Centimeters, Meters, Kilograms, Cups, Pints, Quarts, Gallons, Grams and Kilograms, Inches and Feet, Milliliters and Liters, Nonstandard Forms of Measurement, Ounces, Pounds, and Tons, Perimeter, Line Graphs, Pictographs, Tally Charts and Bar Graphs, Elapsed Time, Parts of a Clock, Time to the Hour, Time to the Minute, Time to the Quarter and Half Hour
https://www.abcya.com/standards/	ABCYA - Standards Based Learning Games
https://home.xtramath.org/	XtraMath - Skill Based Learning Games
https://www.khanacademy.org/math/cc-third-grade-math	Khan Academy - Skill Based Learning Videos & Practice Activities
https://login.i-ready.com/	iReady Assessments & Individualized Lessons
https://www.mathgames.com/grade3	Math Games - Skill Based Learning Games
https://www.savvas.com/index.cfm?locator=PS38Dv	enVision Math - Textbook Resources
https://media.pk12ls.com/curriculum/math/envisionk5games/index.html#/Grade:3/	enVision Student Games - • Save the Word: Vocabulary Words with Definitions

https://media.pk12ls.com/curriculum/math/Tools/MTindex.html	enVision Digital Math Tools & Manipulatives

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- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students with 504 plan

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge

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Students at Risk for Failure

- Pair with adult mentor or buddy
- Be flexible with assignments
- Offer several alternatives from which all students can choose
- Use visuals
- Introduce key vocabulary before lesson
- Provide peer tutoring
- chants, songs
- preferential seating

Unit 3: Number and Operations in Base Ten	**Topics 8-10 Duration:** End of January - End of February 28 Days
Standards	
A.	**Use place value understanding and properties of operations to perform multi-digit arithmetic**
3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100
3.NBT.2	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3.NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.
	Primary Interdisciplinary Connections
	ELA Standards
SL.3.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
SL.3.1.B	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
	Career Readiness, Life Literacies and Key Skills
	This outlines concepts and skills necessary for New Jersey's students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy. https://www.nj.gov/education/standards/clicks/index.shtml **9.1 Personal Financial Literacy** This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers. **9.2 Career Awareness** This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements. **9.3 Career and Technical Education** This standard outlines what students should know and be able to do upon completion of a CTE Program of Study. **9.4 Life Literacies and Key Skills** This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy.

	• 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors. ● 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes. ● 9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements ● 9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6). ● 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.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1). ● 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. ● 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). ● 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
	Computer Science and Design Thinking Standards (Technology)
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim
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8.1.5.DA.5	Propose cause and effect relationships, predict outcomes, or communicate ideas using 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.

Essential Understandings *Students will understand that...*	**Essential Questions**
● Building and taking apart numbers provides a deep understanding of the base 10 number system. ● Knowledge and use of place value for large numbers provides context for distances. ● Addition and subtraction are related ● Some real-world problems that involve joining, separating, part-part-whole, or comparing can be solved using addition. Two or more numbers can be added in any order, and the sum of any number and 0 is that number.	● How can sums and differences be estimated and found mentally? ● What are procedures for adding and subtracting whole numbers? ● What strategies can be used for multiplying by multiples of 10?

● Generalizations about how addition works emerge from investigating patterns and reasoning about mathematical relationships. ● There is more than one way to do mental math. Techniques involve changing the numbers or the expressions so that calculations are easy to do mentally. ● Rounding is a process for finding multiples of 10 and 100 that are closest to a given number. ● There is more than one way to estimate a sum or difference. Two ways to estimate are rounding and using compatible numbers. ● The expanded algorithm for adding 3-digit numbers or subtracting multi-digit numbers into a series of easier problems based on place value. Answers to the simpler problems are then used to find the final sum. ● Patterns, different strategies, basic multiplication facts, and properties of multiplication can be used to find products when one factor is a multiple of 10.	
Evidence of Student Learning	
Performance Tasks: *Activities to provide evidence for student learning of content and cognitive skills.*	**Other Assessments**
<u>Amusement Park Debacle:</u> Objective: Students must create a spreadsheet of all different ways that they can allocate their tickets. Students will analyze the list and choose the combination that gets them the most for their tickets. Students will explain which option works best and why. You are going to the greatest amusement park ever. All the Raptor Rides cost 4 tickets. Jurassic Rides are just two tickets. All Gator Games and T-Rex Treats are a bargain at one ticket each. But a ride on the heart-pounding Terrible Triceratops costs six tickets! If you were given 20 tickets, find as many different combinations of ways that you could use your tickets as you can. Which combination would you use? Why?	**Formative Assessments** ● Teacher Observation ● Performance Assessments ● Exit Slips ● Games ● Anecdotal Records ● Oral Assessments/Conferencing ● Portfolio/Math Journals Daily ● Classwork ● Pre-assessments ● iReady Math Assessments ● enVision Topic Performance Assessments **Summative Assessments** ● Tests

	● Quizzes ● National/State/District Wide Assessments ● enVision Topic Assessments **Benchmark Assessment** ● enVision Benchmark Assessment **Alternative Assessments** ● Untimed Fact Practice Assessment ● Manipulative Driven Assessment ● Modified/Teacher Created Chapter Tests ● Modified/Teacher Created Mid-Chapter Quiz ● Visual Representation of Skills Assess ● Modified Classwork Assignments ● Modified Benchmarks ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Mathematical Practices	
MP 2: Reason Abstractly and Quantitatively MP 3: Construct Viable Arguments & Critique the Reasoning of Other	
Vocabulary	
Associative Property of Addition, Commutative Property of Addition, Identity Property of Addition, open number line, inverse operations, round, place value, compatible numbers, regroup, conjecture	
Knowledge and Skills	
Content	**Skills**
Cluster: ● Use place value understanding and properties of operations to perform multi-digit arithmetic *Students will know…* ● Place value and properties of operations to add and subtract ● How to use a variety of estimation strategies (e.g., rounding and mental math) for estimating both quantities	*Students will be able to …* ● Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. ● Use place value to round whole numbers to the nearest 10 or 100. ● Multiply one digit whole numbers by multiples of 10. ● Use a variety of strategies to work with numbers to:

and the result of computations to determine if something is reasonable ● Multiples of ten are based on place value	- Round numbers to the nearest 10 and 100 - Estimate sets of large quantities ● Read, write and model numbers in standard, expanded, and written form up to 4 digits ● Compare and order whole numbers to the thousands Rename a number by regrouping its value (e.g., rename 15 as 1 ten 5 ones or 15 ones) ● Identify the value of a digit given its place in a number ● Recognize and describe arithmetic patterns on an addition table and multiplication table
Instructional Plan	
Suggested Activities	**Resources**
Number sense game - Players draw 4 cards, place the cards in place value order to try to create the largest 4 digit number. Whoever created the largest 4 digit number wins the round.	Math number cards
Rounding in the Real World - Students must look over a grocery list and round the values of the items to decide how much money they need to bring with them to the store.	Grocery Store Circular (i.e. ShopRite)
Multiples of 10 Shopping list- Students are given a shopping list and have to purchase enough items for the class.	Store Circular (CVS, Walmart, etc.)
Greater Than, Less Than Family Feud game- students will play in a family feud-style game show competing one on one identifying if numbers are greater than, less than, or equal to.	Index cards with various numbers on each
Place Value game- Students will participate in a game that demonstrates their knowledge of place value. In two teams, students will send one person at a time to come to the board, where they will place sentence strips over numbers identifying the correct place value. Students will work as a team to complete a 4+ digit number with correct place values.	Sentence strips with place value names written on them, magnets for the back of sentence strips, white board, expo markers
Vocabulary Activity - Students will compare and contrast vocabulary words that they can use as clues to determine if they are solving an addition or subtraction word problem. A t-chart or venn diagram can be used to organize these ideas. Possible Vocabulary Words: add, subtract, sum, difference, plus, both,	T-chart or venn diagram, list of vocabulary words, sample word problems to practice this skill with

join, in all, combined, increased, how many more, left, less than, take away, minus, remain)	
enVision Topic 8 "Pick A Project" Choice Activities - Students will choose a project to practice strategies and properties to add and subtract. ● *Project 8A - Oranges Are Appealing:* Students will create a poster to plan a citrus grove and show the estimated number of trees in each section and the estimate of the total amount that will grow. ● *Project 8B - Road Trip:* Students will create and perform a short skit giving three examples of how to use the Commutative Property of Addition. ● *Project 8C - You Can Count on Me:* Students will create a game using number cubes that practices mental math of addition and subtraction. ● *Project 8D - Making Sense of the Census:* Students will design a data table to show data from a class census about estimations.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 8A: poster board, number cubes ● Project 8B: paper, pencil ● Project 8C: paper, pencil, number cubes ● Project 8D: paper, pencil
enVision Topic 9 "Pick A Project" Choice Activities - Students will choose a project to practice fluently adding and subtracting within 1,000. ● *Project 9A - Skyscrapers:* Students will research and collect data about famous buildings. Students will write equations to find the difference between the building heights and then create a table and graphs to display these differences. ● *Project 9B - Receive the Receipt:* Students will create and perform a skit that includes adding and subtracting 2-digit and 3-digit numbers. ● *Project 9C - Making Time for Space:* Students will write a report about a vacation and use addition and subtraction to keep track of the travel time and time for different vacation activities.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 9A: number cubes ● Project 9B: paper, pencil ● Project 9C: paper, pencil
enVision Topic 10 "Pick A Project" Choice Activities - Students will choose a project to practice multiplying by multiples of 10.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 10A: computer, map

● *Project 10A - Come Fly Away!:* Students will research and create a table about the distance between two cities using properties of multiplication to find the products of different traveling distances. ● *Project 10B - Shopping Spree:* Students will create their own store and will create a table to show the price of each item selling and then use different multiples of 10 to see how many items can be packed and sold in each box. ● *Project 10C - Breathing Trees:* Students will design a park and sing a song about how multiplication can be used to find the number of trees and wildlife in the park. ● *Project 10D - Bulk Shipment:* Students will make a multiplication game.	● Project 10B: paper, pencil, items ● Project 10C: paper, pencil, number cubes ● Project 10D: paper, pencil

Math Literature

Textbook: *enVision Mathematics Common Core*, Savvas Learning Company LLC., 2020

Place Value

- *The King's Commissioners* by Aileen Freidman
- *Sir Cumference and the All the King's Tens* by Cindy Neuschwander
- *Earth Day--Hooray!* by Stuart Murphy
- *How Much is a Million?* by David Schwartz
- *The Math Curse* by Jon Scieszka and Lane Smith

Addition

- *The Mission of Addition* by Brian P. Cleary
- *Addition Annie* by David Gisler
- *The Hershey's Kisses Addition Book* by Jerry Pallotta
- *Double Play: Monkeying Around with Addition* by Betsy Franco

Subtraction

- *The Action of Subtraction* by Brian P. Cleary
- *Elevator Magic* by Stuart J. Murphy
- *Subtraction Action* by Loreen Leedy
- *Subtract It! Fun with Subtraction* by Rachel First

Rounding

- *Betcha!* by Stuart J. Murphy
- *Let's Estimate: A Book About Estimating and Rounding Numbers* by David A. Adler
- *Math Concepts Made Easy: Rounding* by Marsha Arvoy, Dorianne Nardi

Patterns:

- *Growing Patterns: Fibonacci Numbers in Nature* by Sarah C. Campbell
- *Patterns in Peru: An Adventure in Patterning* by Cindy Neuschwander

Websites	
http://nlvm.usu.edu/en/nav/topic_t_1.html	NLVM (National Library of Virtual Manipulatives) - Manipulatives
http://www.mathwire.com/numbersense/placevalue.html http://www.mathwire.com/numbersense/morepv.html	Mathwire - Number Sense and Place Value
https://www.flocabulary.com/subjects/math/	Flocabulary - Educational Hip-Hop Songs and Videos ● Related Videos/Activities: Addition with Regrouping, Subtraction with Regrouping, Place Value, Rounding Numbers, Word Problems, Estimation with Rounding
https://login.i-ready.com/	iReady Assessments & Individualized Lessons
https://www.mathplayground.com/grade_3_games.html	Math Playground - Standards Based Learning Games
https://www.iknowit.com/third-grade.html	I Know It! - Standards Based Learning Games
https://www.ixl.com/math/grade-3	IXL - Skill Based Learning Games
https://www.brainpop.com/math/	BrainPop - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Rounding, Estimating
https://jr.brainpop.com/math/	BrainPop Jr. - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Place Value, Rounding, Adding with Regrouping, Subtraction with Regrouping
https://www.abcya.com/standards/	ABCYA - Standards Based Learning Games
https://home.xtramath.org/	XtraMath - Skill Based Learning Games
https://www.khanacademy.org/math/cc-third-grade-math	Khan Academy - Skill Based Learning Videos & Practice Activities
https://prodigygame.com	Prodigy - Standard-Based Learning Game
https://www.mathgames.com/grade3	Math Games - Skill Based Learning Games
https://www.savvas.com/index.cfm?locator=PS38Dv	enVision Math - Textbook Resources
https://media.pk12ls.com/curriculum/math/envisionk5games/index.html#/Grade:3/	enVision Student Games - ● Save the Word: Vocabulary Words with Definitions ● Gobbling Globs: Place Value - Thousands and Ten Thousands ● Galaxy Hunt: Place Value - Millions ● Robo Launch: Add and Subtract 2-Digit Numbers ● Add It: Adding Three Numbers

	● Fluency: Add and Subtract within 1,000
https://media.pk12ls.com/curriculum/math/Tools/MTindex.html	enVision Digital Math Tools & Manipulatives

Accommodations & Modifications

Basic Skills

- Use of an Addition and Multiplication table
- Intensive Intervention
- Regulate place value
- Regulate total number of items
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Provide manipulatives or the opportunity to draw solution strategies
- Keep in mind learner's multi-sensory, visual, and auditory style and teach lessons using incorporating those learning styles
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Economically Disadvantaged

- Use of an Addition or Multiplication table
- Intensive Intervention
- Regulate place value
- Regulate total number of items
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with materials to support lessons, such as, manipulatives and support for home connections

English Language Learners

- Use of an Addition or Multiplication table
- Regulate place value
- Regulate total number of items
- Bilingual Math Boards
- enVision Language Support Handbook
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to

- Provide manipulatives or the opportunity to draw solution strategies
- Use peer groupings and supports

Gifted & Talented

- Regulate place value
- Regulate total number of items
- Use of higher order thinking questions
- Expose Students to Higher Level Vocabulary Based on Lesson Skills
- Provide students who successfully complete class assignments on the first try additional challenge problems
- Provide students with choice activities and choice boards that relate to the skills of the lesson to continue to extend student learning
- Provide students with enrichment activities, such as enVision Enrichment Practice pages for each lesson

Students with IEPs

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
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Students with 504 plan

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Students at Risk for Failure

- Pair with adult mentor or buddy
- Be flexible with assignments
- Offer several alternatives from which all students can choose
- Use visuals
- Introduce key vocabulary before lesson
- Provide peer tutoring
- chants, songs
- preferential seating

Unit 4: Number and Operations - Fractions	Topics 12-13 Duration: March - April, 22 Days
Standards	
A.	**Develop understanding of fractions as numbers.**
3.NF.1	Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a part of size 1/b.
3.NF.2	Understand a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. b. Represent a fraction a/b on a number line diagram by marking off a length 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
3.NF.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram. d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.
	Primary Interdisciplinary Connections
	ELA Standards
SL.3.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
SL.3.1.B	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
	Career Readiness, Life Literacies and Key Skills

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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.

Essential Understandings *Students will understand that...*	**Essential Questions**
● Fractions represent equal parts of a whole ● Unit fractions are represented on a number line ● Fractions with different numerators and denominators can be compared by reasoning about their size ● The whole can be found given a fractional part ● The denominator represents the number of equal parts between 0 and 1 ● The numerator represents the number of parts between 0 and the point ● A number line can be used to represent fractions greater than 1 ● A line plot is a way to organize data on a number line ● The same fractional amount can be represented by an infinite set of different but equivalent fractions ● If two fractions have the same denominator, the fraction with the greater numerator is the greater fraction ● If two fractions have the same numerator, the fraction with the greater denominator is less than the other fraction ● Benchmark numbers such as 0, ½, and 1 can be used to compare fractions ● You can use a number line to compare fractions	● What are different interpretations of a fraction? ● What are different ways to compare fractions?

<table>
<tr><th colspan="2">Evidence of Student Learning</th></tr>
<tr><td>Performance Tasks: Activities to provide evidence for student learning of content and cognitive skills.</td><td>Other Assessments</td></tr>
<tr><td><u>What's on the Menu</u>
Students determine 3 items for a well-balanced nutritious menu which includes soup (appetizer), main entree, and a dessert
Research well balanced meals and portions needed for your menu (food pyramid)
Research recipes for each item on your menu, including each ingredient and the fractional parts needed to prepare your items on the menu
You were just hired as the chef of a new restaurant in town. You have been asked to design a special menu for opening night. The menu must include an appetizer, main entree, and dessert. You must include a vivid description of each item on your menu, the recipe for each item, as well as the cost.</td><td>Formative Assessments
Teacher Observation
Performance Assessments
Exit Slips
Games
Anecdotal Records
Oral Assessments/Conferencing
Portfolio/Math Journals Daily
Classwork
Pre-assessments
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Project Based Assessments with Scoring Rubric</td></tr>
<tr><th colspan="2">Mathematical Practice</th></tr>
<tr><td colspan="2">MP4: Model with Mathematics
MP8: Look for and Express Regularity in Repeated Reasoning</td></tr>
</table>

<table>
<tr><th colspan="2">Vocabulary</th></tr>
<tr><td colspan="2">denominator, fraction, line plot, nearest fourth inch, nearest half inch, numerator, unit fraction, equivalent fractions</td></tr>
<tr><th colspan="2">Knowledge and Skills</th></tr>
<tr><th>Content</th><th>Skills</th></tr>
<tr><td>Cluster:
● Develop understanding of fractions as numbers: Chapters 12 & 13
Students will know…
● A unit fraction represents one part of a whole that has been divided into equal parts. A fraction can represent multiple copies of a unit fraction.
● The whole can be found given a fractional part.
● Points on a number line represent fractions. The denominator represents the number of equal parts between 0 and 1, and the numerator represents the number of parts between 0 and the point.
● A number line can be used to represent fractions greater than 1.
● A line plot is a way to organize data on a number line.
● The same fractional amount can be represented by an infinite set of different equivalent fractions.
● There are a limitless number of fraction names for each point on a number line. These points can be used to name equivalent fractions.
● If two fractions have the same denominator, the fraction with the greater numerator is the greater fraction.
● If two fractions have the same numerator, the fraction with the greater denominator is less than the other fraction.
● Benchmark numbers such as 0, ½, and 1 can be used to compare fractions.
● You can use a number line to compare fractions.</td><td>Students will be able to …
● Understand how to read and write unit fractions for equal-sized parts of a region.
● Use a fraction to represent multiple copies of a unit fraction.
● Determine and draw the whole (unit) given one part (unit fraction).
● Represent fractions less than 1 on a number line.
● Represent fractions greater than 1 on a number line.
● Measure length to the nearest half inch and show the data on a line plot.
● Find equivalent fractions that name the same part of the whole.
● Represent equivalent fractions on the number line.
● Use models such as fraction strips to compare fractions that refer to the same whole and have the same denominator.
● Use models such as fraction strips to compare fractions that refer to the whole and have the same numerator.
● Use benchmark numbers to compare fractions.
● Use the number line to compare fractions.</td></tr>
<tr><th colspan="2">Instructional Plan</th></tr>
<tr><th>Suggested Activities</th><th>Resources</th></tr>
</table>

Fraction top it- Players flip over one fraction card and compare who has the greater fraction.	Everyday math fraction cards
Equivalent Fraction strip game- Use 5 strips of paper. Each strip represents 1 whole, halves, quarters, eighths, and sixteenths. Students play with a partner to roll a fraction dice to place the fraction represented on the dice onto the whole. First person to fill in their whole strip wins.	Fraction strips (student made) fraction dice (teacher made)
Cut It Up- Students work with graham crackers to create different fractions and identify how as the denominator increases the size of each piece decreases.	https://www.education.com/pdf/dividing-fractions-graham-crackers/
Fraction Scavenger Hunt- Identify fractions in the real world.	Scavenger hunt checklist, paper, pencil
Recipe Fractions- Students follow a recipe and explore how fractions are used in the real world. Students will pretend to be a chef and present the recipe to a mock ´menu¨ identifying how many people the recipe can feed.	Provide recipes for favorite desserts, beverages, meals, etc.
Leapfrog Fractions - Students will use fractions to solve problems and help the frog leap across the lily pads.	Leapfrog Fractions Activity: https://www.insidemathematics.org/sites/default/files/materials/leapfrog%20fractions.pdf
enVision Topic 12 "Pick A Project" Choice Activities - Students will choose a project to practice understanding fractions as numbers. ● *Project 12A - Island Intelligence:* Students will make a map of their own island and indicate 5 locations as a fraction of the distance from the Tourist Center. ● *Project 12B - Floor to Floor:* Students will create a flooring design and describe what fraction of each material or color makes up the floor. ● *Project 12C - Hats Off!:* Students will collect hat size data and create a line plot. Students will use fractions to describe the hat sizes. ● *Project 12D - Veggie Galaxy:* Students will draw a garden plot and record the fraction of the garden that is filled with each type of fruit or vegetable.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 12A: paper, pencil ● Project 12B: paper, pencil, number cube ● Project 12C: paper, pencil, tape measurement ● Project 12D: paper, pencil

enVision Topic 13 "Pick A Project" Choice Activities - Students will choose a project to practice fraction equivalence and comparison. ● *Project 13A - Horsepower!:* Students will design a race track for horses and compare the lengths of the track using fractions with different numerators and denominators. ● *Project 13B - All Is Well That Ends Well:* Students will create a picture of a well and use fractions to compare the distance dug for the well. ● *Project 13C - In The Bag:* Students will plot fractions on a number line.	enVision Pick a Project Descriptions and Materials (listed below): ● Project 13A: paper, pencil ● Project 13B: paper, markers and/or crayons ● Project 13C: paper, pencil, number cube
Math Literature	
Textbook: *enVision Mathematics Common Core*, Savvas Learning Company LLC., 2020 **Fractions** ● *Fraction Fun* by David Adler ● *Give Me Half!* By Stuart Murphy ● *Clean Sweep Campers* by Lucille Recht Penner ● *Hershey's Fractions Book* by Jerry Pollatta ● *A Fraction's Goal - Parts of a Whole* by Brian P. Cleary ● *Working with Fractions* by David A. Adler ● *Sir Cumference and the Fraction Faire* by Cindy Neuschwander ● *Funky Fractions* by Lisa Arias ● *Fraction Action* by Lisa Arias ● *Dynamic Denominators* by Lisa Arias ● *Mixed Numbers* by Claire Piddock	
Websites	
http://www.mathplayground.com/index_fractions.html	Math Playground - Fraction Games
https://www.sheppardsoftware.com/mathgames/menus/fractions.htm	Sheppard Software - Fraction Games
https://prodigygame.com/	Prodigy - Fraction games
https://www.flocabulary.com/subjects/math/	Flocabulary - Educational Hip-Hop Songs and Videos ● Related Videos/Activities: Fractions, Equivalent Fractions
https://login.i-ready.com/	iReady Assessments & Individualized Lessons
https://www.iknowit.com/third-grade.html	I Know It! - Standards Based Learning Games

https://www.ixl.com/math/grade-3	IXL - Skill Based Learning Games
https://www.brainpop.com/math/	BrainPop - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Fractions, Mixed Numbers, Simplifying Fractions
https://jr.brainpop.com/math/	BrainPop Jr. - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Basic Parts of a Whole, Equivalent Fractions, Mixed Numbers, More Fractions
https://www.abcya.com/standards/	ABCYA - Standards Based Learning Games
https://home.xtramath.org/	XtraMath - Skill Based Learning Games
https://www.khanacademy.org/math/cc-third-grade-math	Khan Academy - Skill Based Learning Videos & Practice Activities
https://www.mathgames.com/grade3	Math Games - Skill Based Learning Games
https://www.savvas.com/index.cfm?locator=PS38Dv	enVision Math - Textbook Resources
https://media.pk12ls.com/curriculum/math/envisionk5games/index.html#/Grade:3/	enVision Student Games - ● Save the Word: Vocabulary Words with Definitions
https://media.pk12ls.com/curriculum/math/Tools/MTindex.html	enVision Digital Math Tools & Manipulatives

Accommodations & Modifications

Basic Skills

- Use of a Multiplication table
- Regulate the cards being used
- Provide fraction pieces
- Provide a checklist with fractions
- Intensive Intervention
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Provide manipulatives or the opportunity to draw solution strategies
- Keep in mind learner's multi-sensory, visual, and auditory style and teach lessons using incorporating those learning styles
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Economically Disadvantaged

- Use of a Multiplication table
- Regulate the cards being used
- Provide fraction pieces

- Provide a checklist with fractions
- Intensive Intervention
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Provide students with materials to support lessons, such as, manipulatives and support for home connections

English Language Learners

- Use of a Multiplication table
- Regulate the cards being used
- Provide a checklist with fractions
- Provide fraction pieces
- Bilingual Math Boards
- enVision Language Support Handbook
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Use peer groupings and supports

Gifted & Talented

- Regulate the cards being used
- Peer lead
- Use of higher order thinking questions
- Expose Students to Higher Level Vocabulary Based on Lesson Skills
- Provide students who successfully complete class assignments on the first try additional challenge problems
- Provide students with enrichment activities, such as enVision Enrichment Practice pages for each lesson
- Provide students with choice activities and choice boards that relate to the skills of the lesson to continue to extend student learning

Students with IEPs

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions

- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Shorten assignments to focus on mastery of skill and quality over quantity
- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students with 504 plan

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Shorten assignments to focus on mastery of skill and quality over quantity
- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students at Risk for Failure

- Pair with adult mentor or buddy
- Be flexible with assignments
- Offer several alternatives from which all students can choose
- Use visuals
- Introduce key vocabulary before lesson
- Provide peer tutoring
- chants, songs
- preferential seating

Unit 5: Geometry	**Topic 15; Duration:** May/June, 10 Days
Standards	
A.	**Reason with shapes and their attributes.**
3.G.1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.
	Primary Interdisciplinary Connections
	ELA Standards
SL.3.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
SL.3.1.B	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
	Career Readiness, Life Literacies and Key Skills
	This outlines concepts and skills necessary for New Jersey's students to thrive in an ever-changing world. Intended for integration throughout all K-12 academic and technical content areas, the 2020 New Jersey Student Learning Standards — Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy. https://www.nj.gov/education/standards/clicks/index.shtml **9.1 Personal Financial Literacy** This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers. **9.2 Career Awareness** This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements. **9.3 Career and Technical Education** This standard outlines what students should know and be able to do upon completion of a CTE Program of Study. **9.4 Life Literacies and Key Skills**

	This standard outlines key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy that are critical for students to develop to live and work in an interconnected global economy. • 9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors. • 9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes. • 9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements • 9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6). • 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.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1). • 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. • 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). • 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
	Computer Science and Design Thinking Standards (Technology)
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.

Essential Understandings	**Essential Questions**
Students will understand that... • Shapes can be classified by their attributes. • Attributes of objects can be measured with appropriate tools. • Quadrilaterals can be described and classified by their sides and angles.	• How can two-dimensional shapes be described, analyzed, and classified?
Evidence of Student Learning	

Performance Tasks: *Activities to provide evidence for student learning of content and cognitive skills.*	**Other Assessments**
<u>Geometric Manahawkin</u> Objective: Students will create their hometown of Manahawkin using geometric shapes. ● Research local businesses, community buildings, churches, housing, ecosystems, landforms, etc. to determine the proper geometric shapes needed. ● Build three dimensional buildings with the use of Legos, tangrams, cardboard, playdough, or various materials. ● Plan and plot as to where these geometric buildings should be laid out. ● Design a descriptive brochure that represents Manahawkin.	**Formative Assessments** ● Teacher Observation ● Performance Assessments ● Exit Slips ● Games ● Anecdotal Records ● Oral Assessments/Conferencing ● Portfolio/Math Journals Daily ● Classwork ● Pre-assessments ● iReady Math Assessments ● enVision Topic Performance Assessments **Summative Assessments** ● Tests ● Quizzes ● National/State/District Wide Assessments ● EOY Benchmark ● enVision Topic Assessments **Benchmark Assessment** ● enVision Benchmark Assessment **Alternative Assessments** ● Untimed Fact Practice Assessment ● Manipulative Driven Assessment ● Modified/Teacher Created Chapter Tests ● Modified/Teacher Created Mid-Chapter Quiz ● Visual Representation of Skills Assess ● Modified Classwork Assignments ● Modified Benchmarks ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Mathematical Practices	
MP 1: Make Sense of Problems and Persevere in Solving Them MP 6: Attend to Precision	

Vocabulary	
polygon, sides, quadrilateral, angle, vertex, trapezoid, parallelogram, rectangle, right angle, rhombus, square, convex, concave	
Knowledge and Skills	
Content	**Skills**
Cluster: ● Reason with shapes and their attributes: Chapter 15 *Students will know…* ● Quadrilaterals can be described and classified by their sides and angles. ● Shapes can be classified by their attributes. ● Quadrilaterals can be classified by their attributes.	*Students will be able to …* ● Identify quadrilaterals and use attributes to describe them. ● Classify shapes according to their attributes. ● Analyze and compare quadrilaterals and group them by their attributes.
Instructional Plan	
Suggested Activities	**Resources**
Geometry Scavenger Hunt: Students will locate and identify shapes in the real world	Paper and pencil or a pre-created worksheet with shape headings
Students will create an illustration using tangrams and templates	Paper, tangrams and templates
Walking Polygons: Students will explore interior angles using their feet	https://www.exploratorium.edu/geometryplayground/Activities/walkingpolygons.php
Students will use real-world logos to locate shapes	Paper and pencil, real world logos
Experimenting with Symmetry- Students will apply transformations and use symmetry to analyze mathematical situations	Pattern blocks: http://mason.gmu.edu/~mmankus/Handson/manipulatives.htm
Part and Whole - Students will identify shapes that have lines of symmetry and draw those lines of symmetry.	Part and Whole Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_part_and_whole_levela_student_2021.pdf
Piece it Together - Students will use pattern blocks to compare the area and perimeter of each shape and create different combinations of pattern blocks to cover a hexagon. Students can also discuss perpendicular and parallel lines in each shape.	Piece it Together Level A Activity: https://www.insidemathematics.org/sites/default/files/assets/inside-problem-solving/inside_problem_solving_piece_it_together_levela_student_2021.pdf

<table>
<tr><td>Which Shape? - Students will identify and describe shapes. Students will also use clues to solve shape based riddles.</td><td>Which Shape? Activity:
https://www.insidemathematics.org/sites/default/files/materials/which%20shape.pdf</td></tr>
<tr><td>enVision Topic 15 “Pick A Project” Choice Activities - Students will choose a project to practice attributes of two-dimensional shapes.
Project 15A - Diamonds and Squares: Students will create quadrilateral riddles.
Project 15B - Trim Size: Students will collect data about the shapes of books.
Project 15C - Quadrilaterals: Students will build a quadrilateral model.</td><td>enVision Pick a Project Descriptions and Materials (listed below):
Project 15A: paper, pencil
Project 15B: construction paper, scissors
Project 15C: construction paper, scissors, tape or glue</td></tr>
<tr><td colspan="2">Math Literature</td></tr>
<tr><td colspan="2">Textbook: enVision Mathematics Common Core, Savvas Learning Company LLC., 2020
Shapes:
When a Line Bends . . . A Shape Begins by Rhonda Gowler
Greene Shapes, Shapes, Shapes by Tanya Hoban
Cubes, Cones, Cylinders, & Spheres by Tanya Hoban
Lines, Segments, Rays, and Angles by Claire Piddick
The Sir Cumference Series by Cindy Neuschwander & Wayne Geehan
The Greedy Triangle by Marilyn Burns
Grandfather Tang’s Story—A Tale Told With Tangrams by Ann Tompert
Shape Up! Fun With Triangles and Other Polygons by David A. Alder
If You Were a Polygon by Marcie Aboff
If You Were a Quadrilateral by Molly Blaisdell
Squares, Rectangles, and Other Quadrilaterals by David A. Adler
Galactic Geometry by Lisa Arias
Glorious Geometry by Lisa Arias
Stone Age Geometry Lines by Gerry Bailey, Felicia Law</td></tr>
<tr><td colspan="2">Websites</td></tr>
<tr><td>https://www.flocabulary.com/subjects/math/</td><td>Flocabulary - Educational Hip-Hop Songs and Videos
Related Videos/Activities: Basic Shapes/Geometry, Symmetry, Parallel and Perpendicular Lines, Types of Angles, Types of Triangles</td></tr>
</table>

http://www.mathplayground.com/index_geometry.html	Math Playground - Geometry Games
http://www.factmonster.com	Fact Monster - Geometry Games
https://login.i-ready.com/	iReady Assessments & Individualized Lessons
https://www.iknowit.com/third-grade.html	I Know It! - Standards Based Learning Games
https://www.ixl.com/math/grade-3	IXL - Skill Based Learning Games
https://www.brainpop.com/math/	BrainPop - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Geometry, Polygons, Types of Triangles, Parallel and Perpendicular Lines
https://jr.brainpop.com/math/	BrainPop Jr. - Educational Math Videos & Skill Based Activities ● Related Videos/Activities: Plane Shapes, Points, Lines, Segments, Rays, Polygons, Quadrilaterals
https://www.abcya.com/standards/	ABCYA - Standards Based Learning Games
https://home.xtramath.org/	XtraMath - Skill Based Learning Games
https://www.khanacademy.org/math/cc-third-grade-math	Khan Academy - Skill Based Learning Videos & Practice Activities
https://www.mathgames.com/grade3	Math Games - Skill Based Learning Games
https://www.savvas.com/index.cfm?locator=PS38Dv	enVision Math - Textbook Resources
https://media.pk12ls.com/curriculum/math/envisionk5games/index.html#/Grade:3/	enVision Student Games - ● Save the Word: Vocabulary Words with Definitions
https://media.pk12ls.com/curriculum/math/Tools/MTindex.html	enVision Digital Math Tools & Manipulatives

Accommodations & Modifications

Basic Skills

- Use of a Multiplication table
- Provide a checklist of shapes
- Provide logos to locate shapes
- Differentiate the shapes used
- Response to Intervention
- Intensive Intervention
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Provide manipulatives or the opportunity to draw solution strategies
- Keep in mind learner's multi-sensory, visual, and auditory style and teach lessons using incorporating those learning styles
- Use of enVision Math Diagnosis and Intervention System and materials

- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Economically Disadvantaged

- Use of a Multiplication table
- Provide a checklist of shapes
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English Language Learners

- Use of a Multiplication table
- Provide a checklist of shapes
- Provide logos to locate shapes
- Bilingual Math Boards
- enVision Language Support Handbook
- Differentiate the shapes used
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
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- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
- Provide manipulatives or the opportunity to draw solution strategies
- Use peer groupings and supports

Gifted & Talented

- Provide logos to locate shapes
- Provide a checklist of shapes
- Differentiate the shapes used
- Use of higher order thinking questions
- Expose Students to Higher Level Vocabulary Based on Lesson Skills
- Provide students who successfully complete class assignments on the first try additional challenge problems
- Provide students with choice activities and choice boards that relate to the skills of the lesson to continue to extend student learning
- Provide students with enrichment activities, such as enVision Enrichment Practice pages for each lesson

Students with IEPs

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all IEP
- Provide manipulatives or the opportunity to draw solution strategies
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- Accountable Talk Stems and Sentence Starters to Engage Students in Group and Peer Conversations
- Provide Additional Time to Complete Assignments and Projects
- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

Students with 504 plan

- One on one instruction
- Adaptive devices
- Provide differentiated instruction as needed
- Follow all 504 plan modifications
- Provide manipulatives or the opportunity to draw solution strategies
- Pre-teach lesson, vocabulary, and skills to support and build student background knowledge
- Restate, reword, and clarify directions and questions
- Use graphic organizers and visual displays to help students organize information and have a reference tool to refer to
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- Use of enVision Math Diagnosis and Intervention System and materials
- Provide students with reteach opportunities using resources, such as, enVision Reteach to Build Understanding Practice pages

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- Pair with adult mentor or buddy
- Be flexible with assignments
- Offer several alternatives from which all students can choose
- Use visuals
- Introduce key vocabulary before lesson

- Provide peer tutoring
- chants, songs
- preferential seating