Summit Public Schools Summit, New Jersey Grade Level: <u>3rd Grade</u>/ Content Area: <u>Math</u>

Course Description

In Grade 3, instructional time should focus on four critical areas:

(1) Developing understanding of multiplication and division and strategies for multiplication and division within 100;

Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.

(2) Developing understanding of fractions, especially unit fractions (fractions with numerator 1);

Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, 1/2 of the paint in a small bucket could be less paint than 1/3 of the paint in a larger bucket, but 1/3 of a ribbon is longer than 1/5 of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

(3) Developing understanding of the structure of rectangular arrays and of area; Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical

rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.

(4) Describing and analyzing two-dimensional shapes;

Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Topic: Operations and Algebraic Thinking		
enVision Math 2020 Units of Study Topic 1 - Understand Multiplication and Division of Whole Numbers Topic 2 - Multiplication Facts: Use Patterns Topic 3 - Apply Properties: Multiplication Facts for 3,4,5,6,8. Topic 4 - Use Multiplication to Divide: Division Facts Topic 5 - Fluently Multiply and Divide Within 100 Topic 11- Use Operations with Whole Numbers to	 Recommended Texts to Support Topic: enVision Math 2020 Resources: Realize Online Platform Student Editions 	
Solve Problems		

Big Ideas: *Course Objectives/Content Statement(s)*

- Develop an understanding of multiplication and division and strategies for multiplication and division within 100.
- Develop an understanding of how to solve two-step problems using whole number operations.

Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings <i>What will students understand about the big ideas?</i>
 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? How do I identify and use patterns to multiply numbers 0-9? How do I identify patterns in number count-bys, multiplication and division. How can the properties of multiplication help me learn strategies to multiply and divide numbers? How does the inverse operation help me use multiplication when solving a division equation? What strategies will help me to fluently multiply 	 The four basic arithmetic operations are interrelated, and the properties of each may be used to understand the others. Knowledge of place value and properties of operations can help when computing with whole numbers. Mathematical concepts can be understood using a variety of models. Estimation can be used to assess the reasonableness of answers. Developing number sense helps to solve problems in a variety of ways. Representing problems and situations mathematically can help us understand real life scenarios. Different math approaches can yield the same results.

and divide within 100?What are ways to solve two-step problems?	
Areas of Focus: Proficiencies (New Jersey Student Learning Standards)	Key Concepts and Skills
Students will: 3.OA.A.1: Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as</i> 5 × 7. 3.OA.A.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. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as</i> 56 ÷ 8. 3.OA.A.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.A.4: Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations</i> 8 × ? = 48, 5 = _ + 3, 6 × 6 = ? 3.OA.B.5: Apply properties of operations as strategies to multiply and divide. <i>2 Examples: If</i> 6 × 4 = 24 is <i>known, then</i> 4 × 6 = 24 is also <i>known. (Commutative property of multiplication.)</i> 3 × 5 × 2 <i>can be found by</i> 3 × 5 = 15, <i>then</i> 15 × 2 = 30, <i>or</i> by 5 × 2 = 10, <i>then</i> 3 × 10 = 30. (<i>Associative property of multiplication.</i>) <i>Knowing that</i> 8 × 5 = 40 <i>and</i> 8 × 2 = 16, <i>one can find</i> 8 × 7 <i>as</i> 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.) 3.OA.C.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	 Identify and use patterns to multiply with 0-9. Use multiplication and drawings to represent equal groups situations, array situations. Relate division to multiplication with an unknown factor. Look for and identify patterns in number count-bys, multiplications and divisions; relate multiplication and division. Build fluency with 0s- 9s multiplications and divisions and learn strategies for quickly multiplying and dividing with individual numbers. Explore patterns in 10s count-bys, multiplications, and divisions and represent and solve problems involving multiplication and division with 10. Identify, solve, and create multiplication and division with 10. Use the area model for multiplication. Understand what a square number is and describe square number patterns in the multiplication table. Use strategies to fluently multiply and divide within 100 and solve two step word problems. Represent and solve word problems with extra, hidden, or not enough information. Represent and solve comparison problems. Solve word problems with unknown starts and write situation and solution equations for word problems. Represent and solve comparison word problems. Solve word problems with unknown starts and write situation and solution equations for word problems. Represent and solve comparison word problems. Represent and solve comparison word problems.

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3.OA.D.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.D.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.*

Mathematical Practices

- MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.
- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

Career-Ready Practices

Technology Integration

and concepts.

CRP2: Apply appropriate academic and technical skills.CRP4: Communicate clearly and effectively and with reason.CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Differentiation

Students use Chromebooks to access SAVVAS

Realize platform to practice and reinforce skills

Students will use Google Classroom to access

links to: interactive activities and math games.

CRP11: Use technology to enhance productivity.

• Solve word problems using two step equations and decide if answers are reasonable.

Revised July 2023

Assessments

Formative Assessments:

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Teacher Observation

Daily Classwork

Individual Lesson Quick Checks

Homework Pages per lesson/topic

Student Activity Pages per lesson/topic

• Students will access various websites, such as iReady, Reflex Math, and Splash Learn to practice and reinforce math skills.

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real-life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language
Broadcasts		With mentors
Models & Figures		

Intervention Strategies		
Accommodations	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need

Summative Assessments:

• Topic Unit Tests 1, 2, 3, 4/ 5, and 11

Topic: Numbers and Operations in Base Ten		
<u>enVision Math 2020 Units of Study</u> Topic 8 - Use Strategies and Properties to Add and Subtract Topic 9 - Fluently Add and Subtract With 1,000 Topic 10 - Multiply by Multiples of 10	Recommended Texts to Support Topic:• enVision Math 2020 Resources:• Realize Online Platform• Student Editions	
 Big Ideas: Course Objectives/Content Statement(s) Using place value understanding and properties of operations to perform multi-digit arithmetic. Understanding concepts of place value allow for multiplication with larger numbers 		
Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?	
 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 rounding numbers to the nearest ten or hundred? How can an understanding of place value help 	 The four basic arithmetic operations are interrelated, and the properties of each may be used to understand the others. Knowledge of place value and properties of operations can help when computing with whole numbers. Estimation can be used to assess the magnetic properties of operations of operations can be used to assess the magnetic properties of operations. 	

me multiply larger numbers more quickly and efficiently?	reasonableness of answers.
Areas of Focus: Proficiencies (New Jersey Student Learning Standards)	Key Concepts and Skills
 Students will: 3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100. 3.NBT.A.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.A.3: Multiply one-digit whole numbers by 	 Use an understanding of place value to group and ungroup multi digit numbers and solve word problems. Round numbers to both the nearest ten and the nearest hundred to estimate sums and differences Apply and discuss multidigit addition methods with place value alignment.

 Multiples of 10 in the range 10-90 (e.g., 9 × 80, 3 × 60) using strategies based on place value and properties of operations. 3.OA.D.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. Mathematical Practices MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning. 	 Decide when and how to group in multidigit addition. Identify and explain errors in addition and solve word problems Subtract with zeros in the top number. Subtract using two different methods. Relate grouping in addition and ungrouping in subtraction. Practice and discuss addition and subtraction methods. Solve word problems that involve two or more steps and assess reasonableness. problems. Explore methods for subtracting multi-digit numbers. Multiply by multiples of 10 using place value and properties of operations
Career-Ready Practices	
CRP2 : Apply appropriate academic and technical skills.	
CRP2 : Apply appropriate academic and technical skills. CRP4 : Communicate clearly and effectively and with	
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 CRP2: Apply appropriate academic and technical skills. CRP4: Communicate clearly and effectively and with reason. CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. CRP11: Use technology to enhance productivity. 	Assessments

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real-life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language
Broadcasts		With mentors
Models & Figures		

Intervention Strategies		
Accommodations	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre-reading strategies and activities previews, anticipatory guides, and semantic	Modified assessment grading

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		mapping	

Topic: Numbers and Operations-Fractions		
<u>enVision Math 2020 Units of Study</u> Topic 12 - Understand Fractions as Numbers Topic 13 - Fraction Equivalence and Comparison	Recommended Texts to Support Topic:• enVision Math 2020 Resources:• Realize Online Platform• Student Editions	
Big Ideas : Course Objectives/Content Statement(s) • Developing understanding of fractions and fractions	ction equivalence.	
Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?	
 What are different interpretations of a fraction? What are different ways to compare fractions? 	 Fractions are numbers that represent equal parts of whole units. Equivalent fractions represent the same part of a whole. Fractions with different numerators and denominators can be compared by reasoning about their size. 	
Areas of Focus: Proficiencies (New Jersey Student Learning Standards)	Key Concepts and Skills	
 Students will: 3.NF.A.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 parts of size 1/b. 3.NF.A.2a-b 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 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 diagram by marking off a lengths 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.A.3a-d Explain equivalence of fractions in special 	 Develop a conceptual understanding of unit fractions and how they are used to build other fractions. Use fraction bars and number lines to represent fractions. Locate fractions on the number line. Use fraction bars and number lines to compare unit fractions. Use fraction circles to develop understanding of comparing fractions with the same denominator or with the same numerator. Develop understanding of equivalent fractions. Find two or more equivalent fractions using number lines. Use fraction concepts to solve real world problems 	

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 45 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.

Mathematical Practices

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- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

Career-Ready Practices

CRP2: Apply appropriate academic and technical skills. **CRP4**: Communicate clearly and effectively and with reason. **CRP9**: Utilize critical thinking to make some of

CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11: Use technology to enhance productivity.

Technology Integration	Formative Assessments:
Differentiation	Assessments
CKI II. Ose technology to enhance productivity.	

- Students use Chromebooks to access SAVVAS Realize platform to practice and reinforce skills and concepts.
- Students will use Google Classroom to access links to: interactive activities and math games.
- Students will access various websites, such as iReady, Reflex Math, and Splash Learn to practice and reinforce math skills.

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Supports for English Language Learners			
Sensory Supports	Graphic Supports	Interactive Supports	
Real-life objects	Charts	In pairs or partners	
Manipulatives	Graphic Organizers	In triands or small groups	
Pictures	Tables	In a whole group	
Illustrations, diagrams & drawings	Graphs	Using cooperative group	
Magazines & Newspapers	Timelines	Structures	
Physical activities	Number lines	Internet / Software support	
Videos & Film		In the home language	
Broadcasts		With mentors	
Models & Figures			

Intervention Strategies			
Accommodations	Interventions	Modifications	
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations	
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials	

- Teacher Observation
- Individual Lesson Quick Checks
- Daily Classwork
- Homework Pages per lesson/topic
- Student Activity Pages per lesson/topic

Summative Assessments:

• Topic Unit Tests 12 and 13

Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre-reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment grading

Topic: Measurement and Data		
<u>enVision Math 2020 Units of Study</u> Topic 6 - Connect Area to Multiplication and Addition Topic 7 - Represent and Interpret Data Topic 14 - Solve Time, Capacity, and Mass Problems Topic 16 - Solve Perimeter Problems	 Recommended Texts to Support Topic: enVision Math 2020 Resources: Realize Online Platform Student Editions 	

Big Ideas: Course Objectives/Content Statement(s)

- Develop an understanding of multiplication and division and strategies for multiplication and division within 100.
- Formulas are used to solve real world problems that require perimeter measurements
- Developing an understanding of data by interpreting and analyzing various types of graphs
- Solving time, capacity, mass, and perimeter problems. Reasoning about attributes of, and composing and decomposing geometric shapes.

Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?
 How does area connect to multiplication and addition? How do I find an unknown side length using the information I am given and the formula for perimeter? How can data be represented, analyzed, and interpreted? How can time, capacity, and mass be measured and found? 	 Data displays convey information in a concise way. Time measurement is a means to organize and structure each day and our lives. Measurements can be used to describe, compare, and make sense of phenomena.
Areas of Focus: Proficiencies (New Jersey Student Learning Standards)	Key Concepts and Skills

Students will:

3.MD.A.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.A.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.

3.MD.B.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.B.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.

3.MD.C.5a: 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.

3.MD.C.6: Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

3.MD.C.7a: 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.

3.MD.C.7c: 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 $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.

3.MD.C.7d: 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

- Measure lengths in inches, half inches, and quarter inches with rulers.
- Use customary units of liquid volume.
- Use metric units of liquid volume.
- Measure and estimate weight and mass. Solve world problems involving liquid volumes or masses using addition, subtraction, multiplication and division.
- Tell and write time to the minute, quarter-hour, half hour, and hour.
- Tell and write the time before and after the hour to the nearest minute.
- Find elapsed time.
- Solve word problems involving addition and subtraction of time intervals in minutes.
- Solve perimeter problems
- Draw scaled pictographs and bar graphs and solve comparison problems using data in pictographs and bar graphs

real world problems.

3.MD.C.5b: 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.C.6: Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

3.MD.C.7.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.

3.MD.D.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.

Mathematical Practices

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- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

Career-Ready Practices

CRP2: Apply appropriate academic and technical skills. **CRP4**: Communicate clearly and effectively and with reason.

CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11: Use technology to enhance productivity.

Differentiation			Assessments
 Technology Integration Students use Chromebooks to access SAVVAS Realize platform to practice and reinforce skills and concepts. Students will use Google Classroom to access links to: interactive activities and math games. Students will access various websites, such as iReady, Reflex Math, and Splash Learn to practice and reinforce math skills. Supports for English Language Learners 			 Formative Assessments: Teacher Observation Individual Lesson Quick Checks Daily Classwork Homework Pages per lesson/topic Student Activity Pages per lesson/topic Summative Assessments: Topic Unit Tests 6, 7, 14, and 16
Sensory Supports	Graphic Supports	Interactive Supports	
Real-life objects	Charts	In pairs or partners	
Manipulatives	Graphic Organizers	In triands or small groups	
Pictures	Tables	In a whole group	
Illustrations, diagrams & drawings	Graphs	Using cooperative group	
Magazines & Newspapers	Timelines	Structures	
Physical activities	Number lines	Internet / Software support	
Videos & Film		In the home language	
Broadcasts		With mentors	
Models & Figures			
Intervention Strategies		jies	
Accommodations	Interventions	Modifications	
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations	
Repeat/confirm directions	Increase task structure (e.g. directions, checks	Differentiated materials	

	for understanding, feedback	
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre-reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment grading

Topic: Geometry		
<u>enVision Math 2020 Units of Study</u> Topic 15- Attributes of Two-Dimensional Shapes	Recommended Texts to Support Topic:• enVision Math 2020 Resources:• Realize Online Platform• Student Editions	
 Big Ideas: Course Objectives/Content Statement(s) Identifying attributes of 2-D shapes help to categorize them 		
Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?	
 What are attributes and how do they help me identify different shapes? What are the different categories of shapes and which attributes do they share? 	 Shapes can be broken into simpler parts. Shapes and dimensions can be used to draw, construct, model and represent real situations or solve problems. Two dimensional shapes can belong to more than one category based on their attributes. Geometry offers ways to interpret and compare real-world objects. Everyday objects have a variety of attributes and can be measured in many ways. 	
Areas of Focus: Proficiencies (New Jersey Student Learning Standards)	Key Concepts and Skills	

Students will : 3.G.A.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.	 Understand the relationship among angles, triangles, and polygons. Explore the relationships among parallelograms, rectangles, squares, rhombuses, and trapezoids. Draw quadrilaterals. Describe the relationships among various types of quadrilaterals and draw quadrilaterals that match a description.
 Mathematical Practices MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning. Career-Ready Practices CRP2: Apply appropriate academic and technical skills. CRP4: Communicate clearly and effectively and with reason. CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. CRP1: Use technology to enhance productivity.	
Differentiation	Assessments
 Technology Integration Students use Chromebooks to access SAVVAS Realize platform to practice and reinforce skills and concepts. Students will use Google Classroom to access links to: interactive activities and math games. Students will access various websites, such as iReady, Reflex Math, and Splash Learn to practice and reinforce math skills. 	 Formative Assessments: Teacher Observation Individual Lesson Quick Checks Daily Classwork Homework Pages per lesson/topic Student Activity Pages per lesson/topic Summative Assessments: Topic Unit Test 15

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real-life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language
Broadcasts		With mentors
Models & Figures		

Intervention Strategies		
Accommodations	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre-reading strategies and activities previews, anticipatory guides,	Modified assessment grading