Quinton Township School District
Math
Grade 3
Pacing Guide

Marking Period:	1	**Unit Title:**	Properties of Adding & Subtracting / Understand Multiplication and Division of Whole Numbers	**Pacing:**	45 Days

Unit Summary: In this unit, students learn strategies to add and subtract whole numbers and decide if an answer is reasonable. Students use multiplication to find how many in all.

Objectives:
Topic 8
Solve real-world problems using properties of addition.
Identify patterns in the addition table and explain them using algebraic thinking.
Use mental math to add.
Use mental math to subtract.
Use place value and a number line to round numbers.
Use rounding or compatible numbers to estimate a sum.
Use rounding or compatible numbers to estimate a difference.
Solve 1 step and multi-step problems by modeling with math.

Topic 1
Use addition to show the relationship between multiplication and addition.
Use number lines to join equal groups.
Use arrays and properties to understand multiplication.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Use sharing to equal groups and to think about division.
Use repeated subtraction to show the relationship between division and subtraction.
Think strategically about available tools that can be used to solve problems.

Topic 2
Gain fluency in multiplication when using 2 and 5 as factors.
Gain fluency in multiplication when using 9 as a factor.
Gain fluency in multiplication when multiplying by 0 or 1.
Gain fluency in multiplication when multiplying by 10.
Use number relationships and patterns to develop reasoning strategies to support their basic recall of the basic multiplication facts.
Use previously learned concepts and skills to represent and solve problems.

Topic 3
Use the Distributive Property to solve problems involving multiplication within 100.
Use the Distributive Property to break apart unknown facts with 3 or 4 as a factor.
Use the Distributive Property to break apart unknown facts with 6 or 7 as a factor.
Use the Distributive Property to break apart unknown facts with 8 as a factor.
Use strategies such as bar diagrams and arrays with known facts to solve multiplication problems.
Use the Associative Property of Multiplication to group factors when multiplying 3 factors.
Use repeated reasoning with known facts to make generalizations when multiplying.

Essential Questions:
Topic 8
How can sum and differences be estimated and found mentally?
How can you round numbers?

Topic 1
How can thinking about equal groups help you understand the connection between multiplication and division?

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

How can you find the total amount of objects in equal groups?
How can you use various strategies to show multiplication?
How can you use appropriate tools to represent and solve problems?

Topic 2
How can I use what I know about equal groups to help multiple numbers?
How can you use patterns to multiply numbers?
How do you use multiplication facts to solve problems?
How can you model with math?

Topic 3
How can you use known multiplication facts to solve unknown multiplication facts?
How can you break up a multiplication fact?
How do you use strategies to multiply?
How can you multiply 3 numbers?
How can you use repeated reasoning when multiplying?

New Jersey Student Learning Standards

Mathematics Learning Targets: 3.MD.A.2, 3.OA.A.1, 3.OA.A.2, 3.OA.A.3, 3.OA.B.5

Math Practices: MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8

Interdisciplinary Connections: 3-LS3-2, 3-LS2-1, 3-LS3-1, SL.PE.3.1

Career Readiness, Life Literacies, and Key Skills: 9.4.5.CI.3, 9.4.5.CT.1, 9.4.5.CT.4

Computer Science and Design Thinking: 8.1.5.AP.1, 8.1.5.DA.1, 8.1.5.DA.3

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<u>Topic 8</u> Lesson 8.1 - Solve real-world problems using properties of addition Lesson 8.2 - Identify patterns in the addition table and explain them using algebraic thinking Lesson 8.3 - Use mental math to add Lesson 8.4 - Use mental math to subtract Lesson 8.5 - Use place value and a number line to round numbers Lesson 8.6 - Use rounding or compatible numbers to estimate a sum Lesson 8.7 - Use rounding or compatible numbers to estimate a difference Lesson 8.8 - Use compatible numbers & rounding to estimate differences	enVision Mathematics Volume 1 & 2 Daily Review Reteach to Build Understanding Build Mathematical Literacy Enrichment enVision Stem Activity Problem-Solving Leveled Reading Mat Problem-Solving Reading Activity Digital Math Tools Activities Language Support Handbook Listen and Look for PD Lesson Video	enVision Mathematics Volumes 1 & 2 enVision Mathematics Volumes 1 & 2 Workbook pages enVision Mathematics Additional Practice Workbook pages Reteach to Understanding pages Game Cards Video Addition Table Multiplication Table Math Board General supplies: paper, pencils, scissors, folder, crayons	Smart Board Applications Google Applications Interactive Student's Edition, Additional Practice Workbook, Solve & Share, Convince Me, Practice Buddy Today's Challenge Visual Learning Animation Plus Quick Check Another Look video Adaptive Practice Animated Glossary Math Tools; Math Games

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Review all Chapter 8 Skills **<u>Topic 1</u>** Lesson 1.1 - Use addition to show the relationship between multiplication and addition Lesson 1.2 - Use number lines to join equal groups Lesson 1.3 - Use arrays and properties to understand multiplication Lesson 1.4 - Use sharing to equal groups and to think about division Lesson 1.5 - Use repeated subtraction to show the relationship between division and subtraction Lesson 1.6 - Think strategically about available tools that can be used to solve problems Review all Chapter 1 Skills **<u>Topic 2</u>** Lesson 2.1 - Gain fluency in multiplication when using 2 and 5 as			Academic Vocabulary Activity Lesson Assessment IXL.com for additional math practice MAP Testing online

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

factors Lesson 2.2 - Gain fluency in multiplication when using 9 as a factor Lesson 2.3 - Gain fluency in multiplication when multiplying by 0 or 1 Lesson 2.4 - Gain fluency in multiplication when multiplying by 10 Lesson 2.5 - Use number relationships and patterns to develop reasoning strategies to support their basic recall of the basic multiplication facts Lesson 2.6 - Use previously learned concepts and skills to represent and solve problems Review all Chapter 2 Skills **<u>Topic 3</u>** Lesson 3.1 - Use the Distributive Property to solve problems involving			

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

multiplication within 100 Lesson 3.2 - Use the Distributive Property to break apart unknown facts with 3 or 4 as a factor Lesson 3.3 - Use the Distributive Property to break apart unknown facts with 6 or 7 as a factor Lesson 3.4 - Use the Distributive Property to break apart unknown facts with 8 as a factor Lesson 3.5 - Use strategies such as bar diagrams and arrays with known facts to solve multiplication problems Lesson 3.6 - Use the Associative Property of Multiplication to group factors when multiplying 3 factors Lesson 3.7 - Use repeated reasoning with known facts to make generalizations when multiplying			

Assessments

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Formative Assessments ● Daily workbook pages practice ● Daily homework practice ● Exit slips ● Savaas Practice Buddy data ● Quizzes	**Summative Assessments** ● Chapter tests **Suggested skills to be assessed:** ● Add whole numbers within 1,000 ● Subtract whole numbers within 1,000 ● Round and estimate numbers ● Multiplication
Benchmark Assessments ● District-assigned Benchmark Assessments (e.g. LinkIt, literacy screeners, content-specific benchmarks)	**Alternative Assessments** ● Alternative Choice Projects ● Oral Assessments

Differentiation			
Special Education	**MLL**	**At Risk**	**Gifted and Talented**
● **Modify and accommodate as listed in student IEP or 504 plan.** ● **Utilize wait time effectively.** ● **Communicate clear, concise directions and repeat, reword, modify as necessary.** ● **Use visual aids during lessons and small-group time.** ● **Utilize open-ended questioning techniques.** ● **Utilize extended time and/or reduce number of items given for homework, quizzes, and tests.** ● **Vary formative assessment styles to drive next point of instruction.**	● **Basic Skills Instruction** ● **Speech/Language Therapy** ● **Rosetta Stone** ● **Provide English/Native Language Dictionary for use.** ● **Place with native-language-speaking teacher/paraprofessional as available.** ● **Use target words and cognates to understand texts.** ● **Remind students to underline passages and list words they don't understand.** ● **Learn/Utilize/Display some words in the students' native language.** ● **Provide and model sentence**	● **Basic Skills Instruction** ● **Provide after-school tutoring services.** ● **Hold fall and spring parent conferences.** ● **Make modifications to instructional plans based on I and RS Plan.** ● **Utilize wait time effectively.** ● **Develop a record system to encourage good behavior and completion of work.** ● **Utilize scaffolding to support instruction.** ● **Provide counseling if necessary to help students cope with challenges.** ● **Utilize strategic grouping with**	● **Promote self-initiated and self-directed learning for growth though independent projects.** ● **Challenge students with age-appropriate texts at higher reading levels.** ● **Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.** ● **Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.**

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

• **Create modified assessments.** • **Allow students to utilize online audio books, when appropriate.** • **Allow for collaboration through strategically selected groups.** • **Utilize assistive technology as appropriate.** • **Utilize graphic organizers.** • **Provide and model sentence frames/sentence starters.** • **Utilize manipulatives as necessary.** • **Provide breaks to allow for refocusing as necessary.**	**frames to help students participate in discussion.** • **Provide word banks to help students write.** • **Translate printed communications in native language for parents.** • **Hold conferences with translator present.**	**a positive academic role model.** • **Utilize graphic organizers.**	

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Quinton Township School District
Math
Grade 3

Marking Period:	2	**Unit Title:**	Using Multiplication & Division / Finding Area / Represent and Interpret Data	**Pacing:**	45 Days

Unit Summary: Students learn strategies to use to multiply and divide. Students use multiplication and division facts, place value, and properties to solve multiplication and division problems. Students will connect finding area to multiplication. Students will also interpret data in a variety of graphs and tables.

Objectives:

Topic 4
Use multiplication facts to divide.
Use multiplication facts to find related division facts.
Use knowledge of even and odd numbers to identify multiplication patterns.
Use properties to understand division involving 0 and 1.
Use patterns and known facts to find unknown multiplication facts. Use multiplication facts to find related division facts.
Use multiplication and division facts to find unknown values in equations.
Use previously learned concepts to find and answer hidden questions to solve problems.

Topic 5
Use the multiplication table and the Distributive Property to find patterns in factors and products.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Use number sense and reasoning while practicing multiplication and division of basic facts.
Use strategies such as skip counting and properties of operations to multiply.
Solve multiplication and division problems that involve different strategies and representations.
Use multiplication and division to write and solve real-world problems involving equal groups.
Use the structures of multiplication and division to compare expressions.

Topic 6
Use unit squares to find the area of a shape.
Use unit squares to find the area of a figure.
Use standard units to measure the area of a shape.
Use unit squares and multiplication to find areas of squares and rectangles.
Use areas of rectangles to model the Distributive Property of Multiplication.
Use areas of rectangles to find the area of irregular shapes.
Solve problems by breaking apart or changing the problem into simpler problems.

Topic 7
Use graphs to compare and interpret data.
Use frequency tables and picture graphs to compare and interpret data.
Use scaled bar graphs to represent data sets.
Use graphs to solve problems.
Use words, symbols, and numbers to accurately and precisely solve math problems.

Essential Questions:
Topic 4
How can you use multiplication facts, place value, and properties to solve multiplication problems?
How can you use division to find how many in each group or how many equal groups?
Topic 5
What are strategies to use multiplication and division facts?

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Topic 6
How does area connect to addition and multiplication?

Topic 7
How can data be represented, analyzed, and interpreted?

New Jersey Student Learning Standards

Mathematics Learning Targets: 3.OA.A.1, 3.OA.A.2, 3.OA.A.3, 3.OA.A.4, 3.OA.B.5, 3.OA.B.6, 3.OA.C.7, 3.OA.D.8, 3.OA.D.9, 3.M.B.3.a, 3.M.B.3.b, 3.M.B.4, 3.M.B.5a, 3.M.B.5b, 3.M.B.5c, 3.M.B.5d

Math Practices: MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8

Cross Curricular Standards:,,

Interdisciplinary Connections: 3-5-ETD1-3, 3-ESS3-1, 3-ESS2-2, 3-ESS2-1, SL.PE.3.1

Career Readiness, Life Literacies, and Key Skills: 9.4.5.CI.3, 9.4.5.CT.1, 9.4.5.CT.4, 9.4.5.IML.2

Computer Science and Design Thinking: 8.1.5.DA.1, 8.1.5.DA.3, 8.1.5.AP.1

Career Education: 9.2.5.CAP.1, 9.2.5.CAP.4

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
Topic 4	enVision Mathematics Volume 1	enVision Mathematics	Smart Board

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Lesson 4-1 - Use multiplication facts to divide Lesson 4-2 - Use multiplication facts to find related division facts. Lesson 4-3 - Use multiplication facts to find related division facts. Lesson 4-4 - Use multiplication facts to find related division facts. Lesson 4-5 - Use knowledge of even and odd numbers to identify multiplication patterns. Lesson 4-6 - Use properties to understand division involving 0 and 1. Lesson 4-7 - Use patterns and known facts to find unknown multiplication facts. Use multiplication facts to find related division facts. Lesson 4-8 - Use multiplication and division facts to find unknown values in equations. Lesson 4-9 - Use previously learned concepts to find and answer hidden	Daily Review Reteach to Build Understanding Build Mathematical Literacy Enrichment enVision Stem Activity Problem-Solving Leveled Reading Mat Problem-Solving Reading Activity Digital Math Tools Activities Language Support Handbook Listen and Look for PD Lesson Video	Volume 1 enVision Mathematics Volume 1 Workbook pages enVision Mathematics Additional Practice Workbook pages Reteach to Understanding pages Game Cards Video Multiplication Table Math Board General supplies: paper, pencils, scissors, folder, crayons	Applications Google Applications Interactive Student's Edition, Additional Practice Workbook, Solve & Share, Convince Me, Practice Buddy Today's Challenge Visual Learning Animation Plus Quick Check Another Look video Adaptive Practice Animated Glossary Math Tools; Math Games Academic Vocabulary Activity Lesson Assessment

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

questions to solve problems. <u>Topic 5</u> Lesson 5-1 - Use the multiplication table and the Distributive Property to find patterns in factors and products. Lesson 5-2 - Use number sense and reasoning while practicing multiplication and division of basic facts. Lesson 5-3 - Use strategies such as skip counting and properties of operations to multiply. Lesson 5-4 - Solve multiplication and division problems that involve different strategies and representations. Lesson 5-5 - Use multiplication and division to write and solve real-world problems involving equal groups. Lesson 5-6 - Use the structures of multiplication and division to compare expressions.			Ixl.com for additional math practice

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

<u>Topic 6</u> Lesson 6-1 - Use unit squares to find the area of a shape. Lesson 6-2 - Use unit squares to find the area of a figure. Lesson 6-3 - Use standard units to measure the area of a shape. Lesson 6-4 - Use unit squares and multiplication to find areas of squares and rectangles. Lesson 6-5 - Use areas of rectangles to model the Distributive Property of Multiplication. Lesson 6-6 - Use areas of rectangles to find the area of irregular shapes. Lesson 6-7 - Solve problems by breaking apart or changing the problem into simpler problems. <u>Topic 7</u> Lesson 7-1 - Use graphs to compare and interpret data. Lesson 7-2 - Use frequency tables and			

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

picture graphs to compare and interpret data. Lesson 7-3 - Use scaled bar graphs to represent data sets. Lesson 7-4 - Use graphs to solve problems. Lesson 7-5 - Use words, symbols, and numbers to accurately and precisely solve math problems.			

Assessments	
Formative Assessments ● Daily workbook pages practice ● Daily homework practice ● Exit slips ● IXL skills ● Savvas Interactive Practice Buddy data ● Quizzes	**Summative Assessments** ● Chapter tests **Suggested skills to be assessed:** ● Multiplication facts ● Division facts ● Solving multiplication and division word problems ● Finding area of a figure ● Solving 2-step problems
Benchmark Assessments ● District-assigned Benchmark Assessments (e.g. LinkIt, literacy screeners, content-specific benchmarks)	**Alternative Assessments** ● Alternative Choice Projects ● Oral Assessments

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Differentiation			
Special Education	**MLL**	**At Risk**	**Gifted and Talented**
• Modify and accommodate as listed in student IEP or 504 plan. • Utilize wait time effectively. • Communicate clear, concise directions and repeat, reword, modify as necessary. • Use visual aids during lessons and small-group time. • Utilize open-ended questioning techniques. • Utilize extended time and/or reduce number of items given for homework, quizzes, and tests. • Vary formative assessment styles to drive next point of instruction. • Create modified assessments. • Allow students to utilize online audio books, when appropriate. • Allow for collaboration through strategically selected groups. • Utilize assistive technology as appropriate. • Utilize graphic organizers. • Provide and model sentence frames/sentence starters. • Utilize manipulatives as necessary. • Provide breaks to allow for refocusing as necessary.	• Basic Skills Instruction • Speech/Language Therapy • Rosetta Stone • Provide English/Native Language Dictionary for use. • Place with native-language-speaking teacher/paraprofessional as available. • Use target words and cognates to understand texts. • Remind students to underline passages and list words they don't understand. • Learn/Utilize/Display some words in the students' native language. • Provide and model sentence frames to help students participate in discussion. • Provide word banks to help students write. • Translate printed communications in native language for parents. • Hold conferences with translator present.	• Basic Skills Instruction • Provide after-school tutoring services. • Hold fall and spring parent conferences. • Make modifications to instructional plans based on I and RS Plan. • Utilize wait time effectively. • Develop a record system to encourage good behavior and completion of work. • Utilize scaffolding to support instruction. • Provide counseling if necessary to help students cope with challenges. • Utilize strategic grouping with a positive academic role model. • Utilize graphic organizers.	• Promote self-initiated and self-directed learning for growth though independent projects. • Challenge students with age-appropriate texts at higher reading levels. • Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge. • Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Quinton Township School District
Math
Grade 3

Marking Period:	3	**Unit Title:**	Using Addition & Multiplication Patterns & Understanding Fractions	**Pacing:**	45 Days

Unit Summary: In Unit 3, students use fractions to describe how much or how many. Students understand how to compare fractions.

Objectives:
Topic 9
Add two numbers by breaking apart problems into simpler problems.
Use regrouping to add 3-digit numbers.
Add 3 or more numbers.
Use partial differences to subtract.
Use regrouping to subtract.
Use strategies to add and subtract.
Use addition and subtraction to justify a conjecture.

Topic 10
Use patterns to find products when one factor is a multiple of 10.
Use different strategies to find products when one factor is a multiple of 10.
Use the properties of multiplication to find products when one factor is a multiple of 10.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Use the structure of multiplication and place value to find products when one factor is a multiple of 10.

Topic 11

Draw diagrams and write equations to solve two-step problems involving addition and subtraction of whole numbers.
Draw diagrams and write equations to solve two-step problems involving multiplication and division of whole numbers.
Examine relationships between quantities in a two-step word problem by writing equations. Choose and apply the operations needed to find the answer.
Critique the reasoning of others by asking questions, identifying mistakes, and providing suggestions for improvement.

Topic 12

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.
Measure length to the nearest fourth inch and show the data on a line plot.
Determine when a problem has either extra or missing information.

Topic 13

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 same whole and have the same numerator.
Use benchmark numbers to compare fractions.
Use the number line to compare fractions.
Use fraction names to represent whole numbers.
Construct math arguments using fractions.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Essential Questions:
How can you use strategies to fluently add and subtract within 1,000?
How can you multiply multiples of 10?
How can you use fractions to describe how much/how many?
How can you compare fractions?

New Jersey Student Learning Standards

Mathematics Learning Targets: 3.OA.A.3, 3.OA.B.5, 3.OA.C.7, 3.OA.D.8, 3.OA.D.9, 3.NBT.A.1, 3.NBT.A.2, 3.NBT.A.3, 3.NF.A.1, 3.NF.A.2.a, 3.NF.A.2.b, 3.NF.A.3.a, 3.NF.A.3.b, 3.NF.A.3.c, 3.NF.A.3.d, 3.G.A.2

Math Practices: MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8

Interdisciplinary Connections: 3-LS4-4, 3-LS4-2, 3-5-ETS1-1, 3-LS4-1, 3-LS1-1, SL.PE.3.1

Career Readiness, Life Literacies, and Key Skills: 9.4.5.CI.3, 9.4.5.CT.1, 9.4.5.CT.4

Computer Science and Design Thinking: 8.1.5.AP.1, 8.1.5.DA.1, 8.1.5.DA.3

Career Education: 9.2.5.CAP.1, 9.2.5.CAP.4

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
Topic 9 Lesson 9-1 - Add two numbers by breaking apart problems into simpler	enVision Mathematics Volume 2 Daily Review	enVision Mathematics Volume 2 enVision Mathematics Volume 2 Workbook	Smart Board Applications Google Applications

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

problems Lesson 9-2 - Use regrouping to add 3-digit numbers Lesson 9-3 - Add 3 or more numbers Lesson 9-4 - Use partial Differences to Subtract Lesson 9-5 - Use Regrouping to Subtract Lesson 9-6 - Use Strategies to Add and Subtract Lesson 9-7 - Use Addition and Subtraction to justify a conjecture <u>Topic 10</u> Lesson 10-1 - Use patterns to find products when one factor is a multiple of 10 Lesson 10-2 - Use different strategies to find products when one factor is a multiple of 10 Lesson 10-3 - Use the properties of multiplication to find products when	Reteach to Build Understanding Build Mathematical Literacy Enrichment enVision Stem Activity Problem-Solving Leveled Reading Mat Problem-Solving Reading Activity Digital Math Tools Activities Language Support Handbook Listen and Look for PD Lesson Video	pages enVision Mathematics Additional Practice Workbook pages Reteach to Understanding pages Game Cards Video Fraction tiles & strips Math Board General supplies: paper, pencils, scissors, folder, crayons	Interactive Student's Edition, Additional Practice Workbook, Solve & Share, Convince Me, Practice Buddy Today's Challenge Visual Learning Animation Plus Quick Check Another Look video Adaptive Practice Animated Glossary Math Tools; Math Games Academic Vocabulary Activity Lesson Assessment Ixl.com for additional math practice

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

one factor is a multiple of 10 Lesson 10-4 - Use the structure of multiplication and place value to find products when one factor is a multiple of 10 <u>Topic 11</u> Lesson 11-1 - Draw diagrams and write equations to solve two-step problems involving addition and subtraction of whole numbers Lesson 11-2 - Draw diagrams and write equations to solve two-step problems involving multiplication and division of whole numbers Lesson 11-3 - Examine relationships between quantities in a two-step word problem by writing equations. Choose and apply the operations needed to find the answer Lesson 11-4 - Critique the reasoning of others by asking questions, identifying mistakes, and providing suggestions for improvement			

<u>Topic 12</u> Lesson 12-1 - Understand how to read and write unit fractions for equal sized parts of a region Lesson 12-2 - Use a fraction to represent multiple copies of a unit fraction Lesson 12-3 - Determine and draw the whole (unit) given one part (unit fraction) Lesson 12-4 - Represent fractions less than 1 on a number line Lesson 12-5 - Represent fractions greater than 1 on a number line Lesson 12-6 - Measure length to the nearest half inch and show the data on a line plot Lesson 12-7 - Measure length to the nearest fourth inch and show the data on a line plot Lesson 12-8 - Determine when a problem has either extra or missing			

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

information <u>Topic 13</u> Lesson 13-1 - Find equivalent fractions that name the same part of the whole Lesson 13-2 - Represent equivalent fractions on the number line Lesson 13-3 - Use models such as fraction strips to compare fractions that refer to the same whole and have the same denominator Lesson 13-4 - Use models such as fraction strips to compare fractions that refer to the same whole and have the same numerator Lesson 13-5 - Use benchmark numbers to compare fractions Lesson 13-6 - Use the number line to compare fractions Lesson 13-7 - Use fraction names to represent whole numbers Lesson 13-8 - Construct math			

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

arguments using fractions			

Assessments	
Formative Assessments ● Daily workbook pages practice ● Daily homework practice ● Exit slips ● IXL skills ● Savvas Interactive Practice Buddy data ● Quizzes	**Summative Assessments** ● Chapter tests **Suggested skills to be assessed:** ● Addition and subtraction strategies ● Multiplying by multiples of 10s ● Identifying fractions ● Comparing fractions ● Solving word problems using all operations ● Solving 2-step word problems ● Solving word problems involving fractions
Benchmark Assessments ● District-assigned Benchmark Assessments (e.g. LinkIt, literacy screeners, content-specific benchmarks)	**Alternative Assessments** ● Alternative Choice Projects ● Oral Assessments

Differentiation			
Special Education	**MLL**	**At Risk**	**Gifted and Talented**
● **Modify and accommodate as listed in student IEP or 504 plan.** ● **Utilize wait time effectively.**	● **Basic Skills Instruction** ● **Speech/Language Therapy** ● **Rosetta Stone** ● **Provide English/Native**	● **Basic Skills Instruction** ● **Provide after-school tutoring services.** ● **Hold fall and spring parent**	● **Promote self-initiated and self-directed learning for growth though independent projects.**

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

• Communicate clear, concise directions and repeat, reword, modify as necessary. • Use visual aids during lessons and small-group time. • Utilize open-ended questioning techniques. • Utilize extended time and/or reduce number of items given for homework, quizzes, and tests. • Vary formative assessment styles to drive next point of instruction. • Create modified assessments. • Allow students to utilize online audio books, when appropriate. • Allow for collaboration through strategically selected groups. • Utilize assistive technology as appropriate. • Utilize graphic organizers. • Provide and model sentence frames/sentence starters. • Utilize manipulatives as necessary. • Provide breaks to allow for refocusing as necessary.	Language Dictionary for use. • Place with native-language-speaking teacher/paraprofessional as available. • Use target words and cognates to understand texts. • Remind students to underline passages and list words they don't understand. • Learn/Utilize/Display some words in the students' native language. • Provide and model sentence frames to help students participate in discussion. • Provide word banks to help students write. • Translate printed communications in native language for parents. • Hold conferences with translator present.	conferences. • Make modifications to instructional plans based on I and RS Plan. • Utilize wait time effectively. • Develop a record system to encourage good behavior and completion of work. • Utilize scaffolding to support instruction. • Provide counseling if necessary to help students cope with challenges. • Utilize strategic grouping with a positive academic role model. • Utilize graphic organizers.	• Challenge students with age-appropriate texts at higher reading levels. • Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge. • Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Quinton Township School District
Math
Grade 3

Marking Period:	4	**Unit Title:**	Time, Capacity, Mass/ Two-Dimensional Shapes/ Perimeter	**Pacing:**	45 Days

Unit Summary: In Unit 4, students understand how to tell time and figure out elapsed time. Students learn what are polygons and rules to identify quadrilaterals. Students will also learn how to solve perimeter problems.

Objectives:

Topic 14
Show and tell time to the nearest minute using analog and digital clocks.
Tell and write time to the nearest minute and measure time intervals in minutes.
Solve word problems involving addition and subtraction to measure quantities of time.
Use standard units to estimate liquid volume.
Use standard units to measure liquid volume.
Use standard units to estimate the masses of solid objects.
Use a pan balance with metric weights to measure the mass of objects in grams and kilograms.
Use pictures to help solve problems about mass and volume.
Make sense of quantities and relationships in problems.

Topic 15

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Identify quadrilaterals and use attributes to describe them.
Classify shapes according to their attributes.
Analyze and compare quadrilaterals and group them by their attributes.
Solve math problems precisely, efficiently, and accurately using appropriate tools and mathematics vocabulary.

Topic 16
Find the perimeter of different polygons.
Find the perimeter of different polygons with common shapes.
Use the given sides of a polygon and the known perimeter to find the unknown side length.
Understand the relationship of shapes with the same perimeter and different areas.
Understand the relationship of shapes with the same area and different perimeters.
Understand the relationship between numbers to simplify and solve problems involving perimeter.

Essential Questions:
How can you tell time and use measurement to describe the size of something?
How can you use the strategy to make a table to organize data and solve problems?
What are some ways to describe two-dimensional shapes?
How can you find the perimeter of a figure?

New Jersey Student Learning Standards

Mathematical Learning Targets: 3.OA.A.3, 3.OA.C.7, 3.OA.D.8, 3.NBT.A.2, 3.NF.A.1, 3.M.A.1, 3.M.A.2, 3.M.C.6, 3.DL.B.4, 3.G.A.1, 3.G.A.2

Math Practices: MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8

Interdisciplinary Connections: 3-PS2-3, 3-PS2-4, 3-PS2-1, 3-PS2-2, 3-LS4-3, SL.PE.3.1

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Career Readiness, Life Literacies, and Key Skills: 9.4.5.CI.3, 9.4.5.CT.1, 9.4.5.CT.4
Computer Science and Design Thinking: 8.1.5.AP.1, 8.1.5.DA.1, 8.1.5.DA.3

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
Topic 14 Lesson 14-1 - Show and tell time to the nearest minute using analog and digital clocks Lesson 14-2 - Tell and write time to the nearest minute and measure time intervals in minutes Lesson 14-3 - Solve word problems involving addition and subtraction to measure quantities of time Lesson 14-4 - Use standard units to estimate liquid volume Lesson 14-5 - Use standard units to measure liquid volume Lesson 14-6 - Use standard units to estimate the masses of solid objects	enVision Mathematics Volume 2 Daily Review Reteach to Build Understanding Build Mathematical Literacy Enrichment enVision Stem Activity Problem-Solving Leveled Reading Mat Problem-Solving Reading Activity Digital Math Tools Activities Language Support Handbook Listen and Look for PD Lesson Video	enVision Mathematics Volume 2 enVision Mathematics Volume 2 Workbook pages enVision Mathematics Additional Practice Workbook pages Reteach to Understanding pages Game Cards Video Clocks Geometric shape manipulatives Colored squares &	Smart Board Applications Google Applications Interactive Student's Edition, Additional Practice Workbook, Solve & Share, Convince Me, Practice Buddy Today's Challenge Visual Learning Animation Plus Quick Check Another Look video Adaptive Practice

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Lesson 14-7 - Use a pan balance with metric weights to measure the mass of objects in grams and kilograms Lesson 14-8 - Use pictures to help solve problems about mass and volume Lesson 14-9 - Make sense of quantities and relationships in problems Topic 15 Lesson 15-1 - Identify quadrilaterals and use attributes to describe them Lesson 15-2 - Classify shapes according to their attributes Lesson 15-3 - Analyze and compare quadrilaterals and group them by their attributes Lesson 15-4 - Solve math problems precisely, efficiently, and accurately using appropriate tools and mathematics vocabulary <u>Topic 16</u>		graph paper Math Board General supplies: paper, pencils, scissors, folder, crayons	Animated Glossary Math Tools; Math Games Academic Vocabulary Activity Lesson Assessment Ixl.com for additional math practice

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

Lesson 16-1 - Find the perimeter of different polygons Lesson 16-2 - Find the perimeter of different polygons with common shapes Lesson 16-3 - Use the given sides of a polygon ad the known perimeter to find the unknown side length Lesson 16-4 - Understand the relationship of shapes with the same perimeter and different areas Lesson 16-5 - Understand the relationship of shapes with the same area and different perimeters Lesson 16-6 - Understand the relationship between numbers to simplify and solve problems involving perimeter			

Assessments	
Formative Assessments ● Daily workbook pages practice ● Daily homework practice	**Summative Assessments** ● Chapter tests

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

• Exit slips • Savvas Interactive Practice Buddy data • Quizzes	**Suggested skills to be assessed:** • Telling time • Solving elapsed time • Measure length in half and fourth inches • Measure liquid volume in liters • Identify polygons • Understand rules for quadrilaterals • Solve 2-step word problems
Benchmark Assessments • District-assigned Benchmark Assessments (e.g. LinkIt, literacy screeners, content-specific benchmarks) • NJSLA state assessment	**Alternative Assessments** • Alternative Choice Projects • Oral Assessments

Differentiation			
Special Education	**MLL**	**At Risk**	**Gifted and Talented**
• **Modify and accommodate as listed in student IEP or 504 plan.** • **Utilize wait time effectively.** • **Communicate clear, concise directions and repeat, reword, modify as necessary.** • **Use visual aids during lessons and small-group time.** • **Utilize open-ended questioning techniques.** • **Utilize extended time and/or reduce number of items given for homework, quizzes, and tests.** • **Vary formative assessment**	• **Basic Skills Instruction** • **Speech/Language Therapy** • **Rosetta Stone** • **Provide English/Native Language Dictionary for use.** • **Place with native-language-speaking teacher/paraprofessional as available.** • **Use target words and cognates to understand texts.** • **Remind students to underline passages and list words they don't understand.** • **Learn/Utilize/Display some words in the students' native**	• **Basic Skills Instruction** • **Provide after-school tutoring services.** • **Hold fall and spring parent conferences.** • **Make modifications to instructional plans based on I and RS Plan.** • **Utilize wait time effectively.** • **Develop a record system to encourage good behavior and completion of work.** • **Utilize scaffolding to support instruction.** • **Provide counseling if necessary to help students**	• **Promote self-initiated and self-directed learning for growth though independent projects.** • **Challenge students with age-appropriate texts at higher reading levels.** • **Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.** • **Provide for the development of self-understanding of one's relationships with people,**

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI

styles to drive next point of instruction. • **Create modified assessments.** • **Allow students to utilize online audio books, when appropriate.** • **Allow for collaboration through strategically selected groups.** • **Utilize assistive technology as appropriate.** • **Utilize graphic organizers.** • **Provide and model sentence frames/sentence starters.** • **Utilize manipulatives as necessary.** • **Provide breaks to allow for refocusing as necessary.**	**language.** • **Provide and model sentence frames to help students participate in discussion.** • **Provide word banks to help students write.** • **Translate printed communications in native language for parents.** • **Hold conferences with translator present.**	**cope with challenges.** • **Utilize strategic grouping with a positive academic role model.** • **Utilize graphic organizers.**	**societal institutions, nature and culture.**

Key: *Amistad ^Holocaust #Climate Change ()DEI @AAPI