*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***September*** ***Topic 1: Solve Addition and Subtraction Problems to 10*** **Domain:** Operations and Algebraic Thinking **Clusters:** Represent and solve problems involving addition and subtraction; Work with addition and subtraction equations.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Subtraction Dance Party*

Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations. Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.	1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. 1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	1-1: Add To 1-2: Put Together 1-3: Both Addends Unknown 1-4: Take From 1-5: Compare Situations 1-6: Compare Situations 1-7: Add To 1-8: Put Together/ Take Apart 1-9: Construct Arguments	add, sum, plus, equals, equation, parts, whole, difference, subtract, minus, more, fewer, addend

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***September/October*** ***Topic 2: Fluently Add and Subtract Within 10*** **Domain:** Operations and Algebraic Thinking **Clusters:** Add and subtract within 20; Understand and apply properties of operations and the relationship between addition and subtraction; Represent and solve problems involving addition and subtraction.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Addition at the Zoo*

Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line. Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.	1.OA.C.5 Relate counting to addition and subtraction. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 1.OA.B.3 Apply properties of operations as strategies to add and subtract. 1.OA.B.4 Understand subtraction as an unknown-addend problem.	2-1: Count on to Add 2-2: Doubles 2-3: Near Doubles 2-4: Facts with 5 on a Ten-Frame 2-5: Add in Any Order 2-6: Count Back to Subtract	number line, doubles fact, near doubles fact

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***September/October (Cont.)*** ***Topic 2: Fluently Add and Subtract Within 10***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.	1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. 1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	2-7: Think Addition to Subtract 2-8: Continue to Think Addition to Subtract 2-9: Solve Word Problems with Facts to 10 2-10: Look for and Use Structure	number line, doubles fact, near doubles fact
Properties: For a given set of numbers there are relationships that are always true, called properties, and these are the rules that govern arithmetic and algebra.			
Basic Facts and Algorithms: There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.			
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***October/November*** ***Topic 3: Addition Facts to 20: Use Strategies*** **Domain:** Operations and Algebraic Thinking **Clusters:** Add and subtract within 20; Represent and solve problems involving addition and subtraction.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Monkey Doubles*		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.	1.OA.C.5 Relate counting to addition and subtraction. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	3-1: Count on to Add 3-2: Count on to Add Using an Open Number Line 3-3: Doubles 3-4: Doubles Plus 1 3-5: Doubles Plus 2 3-6: Make 10 to Add 3-7: Continue to Make 10 to Add	open number line, doubles-plus-1 fact, doubles-plus-2 fact, make 10
Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.			
Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***October/November (Cont.)*** ***Topic 3: Addition Facts to 20: Use Strategies***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Properties: For a given set of numbers there are relationships that are always true, called properties, and these are the rules that govern arithmetic and algebra.	1.OA.C.5 Relate counting to addition and subtraction. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	3-8: Explain Addition Strategies 3-9: Solve Addition Word Problems with Facts to 20 3-10: Critique Reasoning	open number line, doubles-plus-1 fact, doubles-plus-2 fact, make 10
Basic Facts and Algorithms: There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.			
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***November*** ***Topic 4: Subtraction Facts to 20: Use Strategies*** **Domain:** Operations and Algebraic Thinking **Clusters:** Add and subtract within 20; Understand and apply properties of operations and the relationship between addition and subtraction; Represent and solve problems involving addition and subtraction.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Flying Subtraction*

Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.	1.OA.C.5 Relate counting to addition and subtraction. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 1.OA.B.4 Understand subtraction as an unknown-addend problem. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	4-1: Count on to Add 4-2: Make 10 to Subtract 4-3: Continue to Make 10 to Subtract 4-4: Fact Families 4-5: Use Addition to Subtract 4-6: Continue to Use Addition to Subtract	fact family, related facts
Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***November (Cont.)*** ***Topic 4: Subtraction Facts to 20: Use Strategies***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
<u>Properties</u>: For a given set of numbers there are relationships that are always true, called properties, and these are the rules that govern arithmetic and algebra.	1.OA.C.5 Relate counting to addition and subtraction. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 1.OA.B.4 Understand subtraction as an unknown-addend problem. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	<u>4-7</u>: Explain Subtraction Strategies <u>4-8</u>: Solve Word Problems with Facts to 20 <u>4-9</u>: Reasoning	fact family, related facts
<u>Basic Facts and Algorithms</u>: There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.			
<u>Practices, Processes, and Proficiencies</u>: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***November/December*** ***Topic 5: Work with Addition and Subtraction Equations*** **Domain:** Operations and Algebraic Thinking **Clusters:** Work with addition and subtraction equations; Represent and solve problems involving addition and subtraction; Understand and apply properties of operations and the relationship between addition and subtraction.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Going to the Zoo*		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value. Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.	1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. 1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	5-1: Find the Unknown Numbers 5-2: True or False Equations 5-3: Make True Equations 5-4: Word Problems with Three Addends 5-5: Add Three Numbers	(none)

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***November/December (Cont.)*** ***Topic 5: Work with Addition and Subtraction Equations***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Properties: For a given set of numbers there are relationships that are always true, called properties, and these are the rules that govern arithmetic and algebra.	1.OA.B.3 Apply properties of operations as strategies to add and subtract. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	5-6: Solve Addition and Subtraction Word Problems 5-7: Precision	(none)
Variables, Expressions, and Equations: Letters and symbols, called variables, can be used to stand for a number or any number from a particular set of numbers. Some mathematical and real-world situations can be represented using variables, operations, and numbers in expressions and equations.			
Solving Equations and Inequalities: Rules of arithmetic and algebra can be used together with notions of equivalence to transform equations and inequalities so solutions can be found.			
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***December*** ***Topic 6: Represent and Interpret Data*** **Domain:** Measurement and Data **Clusters:** Represent and interpret data.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Sports Graphs*		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
<u>Comparison and Relationships</u>: Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.	1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. 1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	<u>6-1</u>: Organize Data into Three Categories <u>6-2</u>: Collect and Represent Data <u>6-3</u>: Interpret Data <u>6-4</u>: Continue to Interpret Data <u>6-5</u>: Make Sense and Persevere	tally marks, data, tally chart, picture graph, survey
<u>Data Collection and Representation</u>: Some questions can be answered by collecting and analyzing data, and the question to be answered determines the data that need to be collected and how best to collect the data. Data can be represented visually using tables, charts, and graphs. The type of data determines the best choice of visual representation.			
<u>Practices, Processes, and Proficiencies</u>: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***January*** ***Topic 7: Extend the Counting Sequence*** **Domain:** Number and Operations in Base Ten **Clusters:** Extend the counting sequence; Understand place value.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Tens of Ants*

Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Number Uses, Classification, and Representation: Numbers can be used for different purposes, and numbers can be classified and represented in different ways.	1.NBT.B.2c Understand that the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.A.1 Extend the counting sequence.	7-1: Count by 10s to 120 7-2: Count by 1s to 120 7-3: Count on a Number Chart to 120 7-4: Count by 1s or 10s to 120 7-5: Count on an Open Number Line 7-6: Count and Write Numerals 7-7: Repeated Reasoning	hundred chart, tens digit, row, ones digit, column
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.			
The Base-Ten Numeration System: The base-ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.			
Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.			
Patterns, Relations, and Functions: Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***January*** ***Topic 8: Understand Place Value*** **Domain:** Number and Operations in Base Ten **Clusters:** Understand place value.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Tens and Ones at the Diner*

Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Number Uses, Classification, and Representation: Numbers can be used for different purposes, and numbers can be classified and represented in different ways.	1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.	8-1: Make Numbers 11 to 19 8-2: Numbers Made with Tens 8-3: Count with Groups of Tens and Leftovers 8-4: Tens and Ones 8-5: Continue with Tens and Ones 8-6: Look For and Use Structure	tens, ones
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.			
The Base-Ten Numeration System: The base-ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.			
Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.			
Patterns, Relations, and Functions: Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***February*** ***Topic 9: Compare Two-Digit Numbers*** **Domain:** Number and Operations in Base Ten **Clusters:** Understand place value; Use place value understanding and properties of operations to add and subtract.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: The Store Needs More*		
Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
<u>The Base-Ten Numeration System</u>: The base-ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.	1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	<u>9-1</u>: 1 More, 1 Less; 10 More, 10 Less <u>9-2</u>: Make Numbers on a Hundred Chart <u>9-3</u>: Compare Numbers <u>9-4</u>: Compare Numbers with Symbols <u>9-5</u>: Compare Numbers on a Number Line <u>9-6</u>: Make Sense and Persevere	less, compare, greater than (>), less than (<)
<u>Comparison and Relationships</u>: Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.			
<u>Patterns, Relations, and Functions</u>: Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.			
<u>Practices, Processes, and Proficiencies</u>: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***February*** ***Topic 10: Use Models and Strategies to Add Tens and Ones*** **Domain:** Number and Operations in Base Ten **Clusters:** Use place value understanding and properties of operations to add and subtract.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Tens at the Hat Store*

Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Number Uses, Classification, and Representation: Numbers can be used for different purposes, and numbers can be classified and represented in different ways. Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line. The Base-Ten Numeration System: The base-ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.	1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	10-1: Add Tens Using Models 10-2: Mental Math: Ten More Than a Number 10-3: Add Tens and Ones Using a Hundred Chart 10-4: Add Tens and Ones Using an Open Number Line 10-5: Add Tens and Ones Using Models	(none)

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***February (Cont.)*** ***Topic 10: Use Models and Strategies to Add Tens and Ones***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
<u>Equivalence</u>: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.	1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	<u>10-6</u>: Make a Ten to Add <u>10-7</u>: Add Using Place Value <u>10-8</u>: Practice Adding Using Strategies <u>10-9</u>: Model with Math	(none)
<u>Basic Facts and Algorithms</u>: There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.			
<u>Practices, Processes, and Proficiencies</u>: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***March*** ***Topic 11: Use Models and Strategies to Subtract Tens*** **Domain:** Number and Operations in Base Ten **Clusters:** Use place value understanding and properties of operations to add and subtract.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Tens at the Shoe Store*

Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Number Uses, Classification, and Representation: Numbers can be used for different purposes, and numbers can be classified and represented in different ways.	1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based in place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. 1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	11-1: Subtract Tens Using Models 11-2: Subtract Tens Using a Hundred Chart 11-3: Subtract Tens Using an Open Number Line 11-4: Use Addition to Subtract Tens	(none)
Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.			
The Base-Ten Numeration System: The base-ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.			
Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***March (Cont.)*** ***Topic 11: Use Models and Strategies to Subtract Tens***	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning.		
Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Operation Meanings and Relationships: There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations. Basic Facts and Algorithms: There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones. Patterns, Relations, and Functions: Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set. Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.	1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based in place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. 1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	11-5: Mental Math: Ten Less Than a Number 11-6: Use Strategies to Practice Subtraction 11-7: Model with Math	(none)

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***March*** ***Topic 12: Measure Lengths*** **Domain:** Measurement and Data **Clusters:** Measure lengths indirectly and by iterating length units.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Help Us Measure*

Big Idea	***Benchmark:*** ***Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Comparison and Relationships: Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.	1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps and overlaps.	12-1: Compare and Order by Length 12-2: Indirect Measurement 12-3: Use Units to Measure Length 12-4: Continue to Measure Length 12-5: Use Appropriate Tools	length, longer, longest, shorter, shortest, measure, length unit
Measurement: Some attributes of objects are measurable and can be quantified using unit amounts.			
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***March/April*** ***Topic 13: Time*** **Domain:** Measurement and Data **Clusters:** Tell and write time.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Parade Time*

Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Measurement: Some attributes of objects are measurable and can be quantified using unit amounts.	1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.	13-1: Understand the Hour and Minute Hands 13-2: Tell and Write Time to the Hour 13-3: Tell and Write Time to the Half Hour 13-4: Reasoning	hour, hour hand, minute, minute hand, o'clock, half hour
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***April/May*** ***Topic 14: Reason with Shapes and Their Attributes*** **Domain:** Geometry **Clusters:** Reason with shapes and their attributes.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: On My Way to School*

Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Geometric Figures: Two- and three- dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes. An object's location in space can be described quantitatively. Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.	1.G.A.1 Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. 1.G.A.2 Compose two-dimensional shapes or three-dimensional shapes to create a composite shape, and compose new shapes from the composite shape.	14-1: Use Attributes to Define Two-Dimensional Shapes 14-2: Defining and Non-Defining Attributes of 2-D Shapes 14-3: Build and Draw 2-D Shapes by Attributes 14-4: Compose 2-D Shapes 14-5: Compose New 2-D Shapes from 2-D Shapes 14-6: Use Attributes to Define Three-Dimensional Shapes 14-7: Defining and Non-Defining Attributes of 3-D Shapes 14-8: Compose with 3-D Shapes 14-9: Make Sense and Persevere	2-D shapes, sides, vertices, edges, faces, flat surface, rectangular prism, three-dimensional (3-D) shapes

*See curriculum for specific number of days for each unit.

Mrs. Esarey **Mrs. Arnao** **Mathematics** ***May*** ***Topic 15: Equal Shares of Circles and Rectangles*** **Domain:** Geometry **Clusters:** Reason with shapes and their attributes.	*Standards for Mathematical Practice:* • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. *Story: Food Fractions*		
Big Idea	***Benchmark: Instructional Essential Standards***	***Essential Understanding***	***Vocabulary***
Comparison and Relationships: Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.	1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	15-1: Make Equal Shares 15-2: Make Halves and Fourths of Rectangles and Circles 15-3: Understand Halves and Fourths 15-4: Model with Math	equal shares, halves, fourths, quarters
Geometric Figures: Two- and three- dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes. An object's location in space can be described quantitatively.			
Practices, Processes, and Proficiencies: Mathematics content and practices can be applied to solve problems.			