

Overview	Standards for Mathematical Content	Unit Focus	Standards for Mathematical Practice
<p>Unit 1</p> <p>Add and Subtract within 100 and Understand Place Value to 1000</p>	<ul style="list-style-type: none"> ● 2.OA.A.1* ● 2.OA.B.2* ● 2.NBT.A.1 ● 2.NBT.A.2* ● 2.NBT.A.3 ● 2.NBT.A.4 ● 2.NBT.B.8 	<ul style="list-style-type: none"> ● Represent and solve problems involving addition and subtraction ● Add and subtract within 20 ● Understand place value ● Use place value understanding and properties of operations to add and subtract 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p>
<p><i>Unit 1:</i></p> <p><i>Suggested Open Educational Resources</i></p>	<p>2.OA.A.1 Pencil and a Sticker</p> <p>2.OA.B.2 Building toward fluency</p> <p>2.NBT.A.1 Making 124</p> <p>2.NBT.A.1 Largest Number Game</p> <p>2.NBT.A.3 Looking at Numbers Every Which Way</p> <p>2.NBT.A.4 Ordering 3-digit numbers</p> <p>2.NBT.B.8 Choral Counting</p>		
<p>Unit 2</p> <p>Place Value Strategies for Addition and</p>	<ul style="list-style-type: none"> ● 2.OA.A.1* ● 2.OA.B.2* ● 2.OA.C.3 ● 2.OA.C.4 ● 2.G.A.2 ● 2.NBT.B.5* ● 2.NBT.B.6 ● 2.NBT.B.7 ● 2.NBT.B.9 	<ul style="list-style-type: none"> ● Represent and solve problems involving addition and subtraction ● Add and subtract within 20 ● Work with equal groups of objects to gain foundations for multiplication 	

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<p>Subtraction</p>	<ul style="list-style-type: none"> ● 2.NBT.A.2* 	<ul style="list-style-type: none"> ● Reason with shapes and their attribute ● Use place value understanding and properties of operations to add and subtract ● Understand place value 	<p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p>
<p>Unit 2: <i>Suggested Open Educational Resources</i></p>	<p>2.OA.B.2 Hitting the Target Number</p> <p>2.OA.C.3 Red and Blue Tiles</p> <p>2.OA.C.4 Counting Dots in Arrays</p> <p>2.G.A.2 Partitioning a Rectangle into Unit Squares</p> <p>2.NBT.B.6 Toll Bridge Puzzle</p> <p>2.NBT.B.7 How Many Days Until Summer Vacation?</p> <p>2.NBT.B.9 Peyton and Presley Discuss Addition</p>		<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>
<p>Unit 3 Measurement</p>	<ul style="list-style-type: none"> ● 2.MD.A.1 ● 2.MD.A.3 ● 2.MD.A.2 ● 2.MD.A.4 ● 2.MD.B.5 ● 2.MD.B.6 ● 2.MD.C.7 ● 2.NBT.A.2* ● 2.NBT.B.5* 	<ul style="list-style-type: none"> ● Measure and estimate lengths in standard units ● Relate addition and subtraction to length ● Work with time ● Understand place value ● Use place value understanding and properties of operations to add and subtract 	<p>MP.1 Make sense of problems and persevere in solving them.</p>
<p>Unit 3: <i>Suggested Open Educational Resources</i></p>	<p>2.MD.A.1,3,4 Determining Length</p> <p>2.MD.B.5 High Jump Competition</p> <p>2.MD.B.6 Frog and Toad on the Number Line</p>		<p>MP.2 Reason abstractly and quantitatively.</p>

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Resources	2.MD.C.7 Ordering Time		<p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>
<p>Unit 4</p> <p>Reason with Shapes and Represent Data</p>	<ul style="list-style-type: none"> ● 2.G.A.1 ● 2.G.A.3 ● 2.MD.C.8 ● 2.MD.D.9 ● 2.MD.D.10 ● 2.OA.B.2* ● 2.NBT.B.5* 	<ul style="list-style-type: none"> ● Reason with shapes and their attributes ● Work with money ● Represent and interpret data ● Add and subtract within 20 ● Use place value understanding and properties of operations to add and subtract 	
<p>Unit 4:</p> <p>Suggested Open Educational Resources</p>	<p>2.MD.C.8 Delayed Gratification</p> <p>2.MD.D.9 Hand Span Measures</p> <p>2.MD.D.9 The Longest Walk</p> <p>2.MD.D.10 Favorite Ice Cream Flavor</p> <p>2.NBT.B.5 Saving Money 1</p> <p>2.NBT.B.5 Saving Money 2</p>		

<p>21st Century Life and Careers Career Awareness, Exploration, and Preparation</p>	<p>9.2.4.A.1 Identify reasons why people work, and how work can help a person achieve personal and professional goals.</p> <p>9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.</p>
<p>Career Ready Practices Standards</p>	<p>CRP2. Apply appropriate academic and technical skills.</p>

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	<p>CRP4. Communicate clearly and effectively and with reason. CRP6. Demonstrate creativity and innovation. CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence.</p>
<p>ELA Standards</p>	<p>RI.2.1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI.2.4. Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area. RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text. W.2.8. Recall information from experiences or gather information from provided sources to answer a question. SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.</p>
<p>Technology Standards</p>	<p>8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). 8.1.2.B.1 Illustrate and communicate original ideas and stories using multiple digital tools and resources. 8.1.2.C.1 Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using various media formats such as online collaborative tools, and social media. 8.1.2.D.1 Develop an understanding of ownership of print and nonprint information. 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.</p>

Unit 1 Grade 2 – Add and subtract within 100; Place value to 1000		
Content Standards	Suggested Standards for Mathematical Practice	Transfer
<ul style="list-style-type: none"> 2.OA.A.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> count on and put together to add to solve one- and two-step word problems. take from or take apart to subtract to solve one- and two-step word problems. use drawings and equations to represent the problem. <p>Learning Goal 1: Add and subtract <u>within 20</u> to solve 1- and 2-step word problems with unknowns in any position.</p>
<ul style="list-style-type: none"> 2.OA.B.2. Fluently add and subtract within 20 using mental strategies. <i>end of Grade 2, know from memory all sums of two one-digit numbers.</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> add <u>within 10</u> using mental strategies with accuracy and efficiency. subtract <u>within 10</u> using mental strategies with accuracy and efficiency. <p>Learning Goal 2: Fluently add and subtract <u>within 10</u> using mental strategies.</p>
<ul style="list-style-type: none"> 2.NBT.A.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 2.NBT.A.1.a. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2.NBT.A.1.b. The numbers 100, 200, 300, 400, 500, 600, 700, 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> 100 can be thought of as a bundle of ten tens — called a <i>hundred</i>. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 <i>tens</i> and 0 <i>ones</i>). <p>Students are able to:</p> <ul style="list-style-type: none"> represent 100 as a bundle of ten <i>tens</i>. represent the number of <i>hundreds</i>, <i>tens</i>, and <i>ones</i> in a 3-digit number.

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<p>800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</p>		<p>Learning Goal 3: Represent a 3-digit number as specific amounts of <i>hundreds</i>, <i>tens</i>, and <i>ones</i>.</p> <p>Learning Goal 4: Identify ten <i>tens</i> as 100 and represent two hundred, three hundred, ... nine hundred with 2, 3, ..., 9 hundred bundles (with zero <i>tens</i> and zero <i>ones</i>).</p>
<ul style="list-style-type: none"> 2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked) 	<p>MP 2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> count by fives within 1000. count by tens within 1000. count by hundreds within 1000. <p>Learning Goal 5: Skip count by 5s and 10s up to 100...beginning at any multiple of 5.</p>
<ul style="list-style-type: none"> 2.NBT.A.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 	<p>MP 2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Expanded form <p>Students are able to:</p> <ul style="list-style-type: none"> read numbers to 1000 written using base-ten numerals. read number names to 1000. read numbers to 1000 written in expanded form. write numbers to 1000 using base-ten numerals, number names, and expanded form. <p>Learning Goal 6: Read numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>Learning Goal 7: Write numbers to 1000 using base-ten numerals, number names, and expanded form.</p>
<ul style="list-style-type: none"> 2.NBT.A.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. 	<p>MP 2 Reason abstractly and quantitatively.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Place value <p>Students are able to:</p> <ul style="list-style-type: none"> use the number of the hundreds, tens and/or ones digits to compare

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	<p>structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>two three-digit numbers.</p> <ul style="list-style-type: none"> • write the results of the comparison using $>$, $=$, or $<$. <p>Learning Goal 8: Use symbols $>$, $=$, $<$ to record the results of comparing two 3-digit numbers by decomposing the number into a number (100s, 10s, and 1s).</p>
<ul style="list-style-type: none"> • 2.NBT.B.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> • Place value <p>Students are able to:</p> <ul style="list-style-type: none"> • Mentally add 10 or 100 from any given number between 100 and 900. • Mentally subtract 10 or 100 from any given number between 100 and 900. <p>Learning Goal 9: Mentally add or subtract 10 or 100 from any given number between 100 and 900.</p>

District/School Formative Assessment Plan	District/School Summative Assessment Plan
<ul style="list-style-type: none"> • Teacher-Created Assessments • Homework • Classwork • UDL's • whiteboard activities • IXL • Problem of the Day • Exit Ticket 	<ul style="list-style-type: none"> • Chapter Tests • Unit Tests • EdConnect Assessments
Focus Mathematical Concepts	

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Vocabulary	Instruction and Pacing	
Addition subtraction equation solve place value expanded form Sum difference symbol fact family standard form Whole strategy hundreds tens ones word form Minus addend greater than > less than < equal to= Adding to taking from putting together taking apart comparing	Pretest	1 day
	Add within 100 to solve word problems	1 week
	Subtract within 100 to solve word problems	1 week
	Fluently, mentally add/subtract within 20	1 week
	Place value of 3-digit numbers	1 week
	Count within 1000, including skip-counting	1 week
	Read and write numbers within 100 various ways	1 week
	Compare 3-digit numbers	1 week
	Mentally add or subtract 10 or 100 to a number from 100-900	2 weeks
ENDURING UNDERSTANDING	ESSENTIAL QUESTIONS	
<ul style="list-style-type: none"> Students will understand that there are a variety of strategies to solve problems, which include: drawing pictures, adding to, taking from, putting together, taking apart, and comparing numbers. Students will understand that 3 digit numbers represent amounts in hundreds, tens, and ones Numbers can be represented in various forms 	<ul style="list-style-type: none"> Which strategy should I use to solve this problem? How do I read and tell the value of a number that is in a specific place to help me solve a problem? Why did I use this strategy or symbol to solve the problem? 	
Differentiation and Accommodations	District/School Primary and Supplementary Resources	
<ul style="list-style-type: none"> Provide graphic organizers Provide additional examples and opportunities for additional problems for repetition Provide tutoring opportunities Provide retesting opportunities after remediation (up to teacher and district discretion) Teach for mastery not test Teaching concepts in different modalities Adjust pace and homework assignments 	<ul style="list-style-type: none"> Go Math!! IXL Teacher created materials 	
Instructional Strategies		
Fairfield Township School recognizes the importance of the varying methodologies that may be successfully employed by teachers within the classroom and, as a result, identifies a wide variety of possible instructional strategies that may be used effectively to support student achievement. These may include, but not be limited to, strategies that fall into categories identified by the Framework for Teaching by Charlotte Danielson: <ul style="list-style-type: none"> Communicating with students Using questioning and discussion techniques Engaging students in learning Using assessment in instruction Demonstrating Flexibility and Responsiveness 		

Common Misconceptions	Proper Conceptions
<ul style="list-style-type: none"> ● Early in the year student have difficulty finding sums and differences for Basic Facts ● Early in the year students confuse the plus and minus sign ● In word problems children have difficulty choosing the operation ● Students have difficulty skip counting when starting at the beginning of a sequence ● Students are not sure when to regroup ● Students are not sure how to record the new numbers once they regroup ● Students add or subtract in the tens column first ● Students mix up tens and ones when counting place value blocks or visuals of tens and ones ● Students place numbers the wrong spots on the place value charts ● Students incorrectly write the values when using expanded form ● Students mix up the greater and less than sign 	<ul style="list-style-type: none"> ● Practicing and reviewing facts strategies help to find sums and differences ● Writing/Tracing and saying the word plus or minus when writing number sentences help to remember the names and meanings of each sign ● Acting out or explaining the story and deciding if you are taking away from a group or putting two groups together helps to “see” the problem ● A hundreds chart can help to skip count by 2’s, 5’s and 10’s ● Using place value blocks and cubes can help us to see when to regroup ● Connecting place value blocks and cubes show the connection to the written number ● Steps to adding and subtracting 2 and 3 digit numbers start in the ones column ● Count and say out loud the tens first, then count the ones ● Reading and using labels on Place Value Charts help us organize numbers correctly ● Writing, counting and recording values one at a time help us with expanded form. ● Always compare the first number Saying out loud “ ___ is greater or less than ____ ”
Performance Task	

You are a principal at a school. You are getting a new addition built onto your school. It will have space for 459 new students from other schools.

- **Using the chart below write the number of students from other schools in order from greatest to least.**
- **Select any two schools and write <, >, or = to compare the number of students.**
- **What two schools together could send all of their students to fill the most spaces available at the new addition?**

SCHOOL	STUDENTS
North Side	213
East Side	355
South Side	142
West Side	162

Rubric

3 Points - Student puts numbers in correct order, uses compare sign correctly, and adds two numbers that add up to the largest sum without exceeding 459.

2 Points - Student puts numbers in correct order, uses compare sign correctly, and adds two numbers but do not add up correctly or to the largest sum without exceeding 459.

1 Point - Student puts numbers mostly in order, uses compare sign correctly, but fails to add two numbers correctly or to the greatest sum without exceeding 459.

0 Points - Student does not show understanding of the task at hand.

Unit 2 Grade 2 – Place value strategies for addition and subtraction

Unit 2 Grade 2 – Place value strategies for addition and subtraction		
Content Standards	Suggested Standards for Mathematical Practice	Transfer

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<ul style="list-style-type: none"> 2.OA.A.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> count on and put together to add to solve one- and two-step word problems. take from or take apart to subtract to solve one- and two-step word problems. use drawings and equations to represent the problem. <p>Learning Goal 1: Add and subtract <u>within 100</u> to solve 1- and 2-step word problems with unknowns in any position.</p>
<ul style="list-style-type: none"> 2.OA.B.2. Fluently add and subtract within 20 using mental strategies. <i>End of Grade 2, know from memory all sums of two one-digit numbers.</i>*(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> add <u>within 10</u> using mental strategies with accuracy and efficiency. subtract <u>within 10</u> using mental strategies with accuracy and efficiency. <p>Learning Goal 2: Fluently add and subtract <u>within 10</u> using mental strategies.</p>
<ul style="list-style-type: none"> 2.OA.C.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Even: groups having even numbers of objects will pair up evenly. Odd: groups having odd numbers of objects will not pair up evenly. <p>Students are able to:</p> <ul style="list-style-type: none"> pair up to 20 object, count by 2s and determine whether the group contains an even or odd number of objects. write an equation to express an even number as a sum of two equal addends. <p>Learning Goal 3: Write an equation to express an even number as a sum of two equal addends.</p>
<ul style="list-style-type: none"> 2.OA.C.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an 	<p>MP.2 Reason abstractly and quantitatively.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Arrays as arrangements of objects.

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<p>equation to express the total as a sum of equal addends</p>	<p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Students are able to:</p> <ul style="list-style-type: none"> with objects arranged in an array, use repeated addition to find the total. with objects arranged in an array, write an equation to express repeated addition. <p>Learning Goal 4: Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>
<ul style="list-style-type: none"> 2.G.A.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.6 Attend to precision.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> partition a rectangle into rows and columns of same-size squares and count to find the total number. <p>Learning Goal 5: Partition a rectangle into rows and columns of same-size squares and count to find the total number.</p>
<ul style="list-style-type: none"> 2.NBT.B.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on place value. with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on properties of operations. with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on the relationship between addition and subtraction. <p>Learning Goal 6: Use a variety of strategies (place value, properties of operation, and/or the relationship between addition and subtraction) to add and subtract within 50.</p>

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<ul style="list-style-type: none"> 2.NBT.B.6. Add up to four two-digit numbers using strategies based on place value and properties of operations. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> add three two digit numbers using place value strategies and properties of operations. add four two digit numbers using place value strategies and properties of operations. <p>Learning Goal 7: Add up to four two -digit numbers using strategies based on place value and properties of operations.</p>
<ul style="list-style-type: none"> 2.NBT.B.7. Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> In adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones. Sometimes it is necessary to compose or decompose tens or hundreds. <p>Students are able to:</p> <ul style="list-style-type: none"> add and subtract within 1000, using concrete models or drawings. add and subtract within 1000 using strategies based on place value. add and subtract within 1000 using properties of operations or the relationship between addition and subtraction. relate the strategies to a written method. <p>Learning Goal 8: Add and subtract within 1000, 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.</p>
<ul style="list-style-type: none"> 2.NBT.B.9. Explain why addition and subtraction strategies work, using place value and the properties of operations. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> Explain, using objects and drawings, why addition and subtraction strategies based on place value work. Explain, using objects and drawings, why addition and subtraction strategies based on properties of operations work. <p>Learning Goal 9: After applying addition and subtraction strategies based on place</p>

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	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>value and the properties of operations, explain why these strategies work using drawings or objects [for example, $37 + 12$ equals $30 + 7 + 10 + 2$ (place value) which equals $30 + 10 + 7 + 2$ (property of operations)].</p>
<ul style="list-style-type: none"> 2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> count within 1000 by ones. count within 1000 by fives, tens, and hundreds beginning at any multiple of 5, 10, or 100. <p>Learning Goal 10: Count within 1000 by ones, fives, tens, and hundreds beginning at any multiple of 1, 5, 10, or 100 (e.g. begin at 505 and skip count by 5 up to 605, or begin at 600 and skip count by 100 up to 1000).</p>

District/School Formative Assessment Plan	District/School Summative Assessment Plan
<ul style="list-style-type: none"> Teacher-Created Assessments Homework Classwork UDL's whiteboard activities IXL Problem of the Day Exit Ticket 	<ul style="list-style-type: none"> Chapter Tests Unit Tests EdConnect Assessments
Focus Mathematical Concepts	

Vocabulary	Instruction and Pacing	
Addition subtraction equation solve place value expanded form odd number even number array skip counting Sum difference symbol fact family standard form Whole strategy hundreds tens ones word form Minus addend greater than > less than < equal to = Adding to taking from putting together taking apart comparing	Pretest	1 day
	Review Adding within 100 to solve word problems	1 week
	Review Subtracting within 100 to solve word problems	1 week
	Fluently, mentally add/subtract within 20	1 week
	Odd/Even numbers	1 week
	Sums of arrays/Partitioning rectangles	1 week
	Add 4 2-digit numbers	1 week
	Add 3-digit numbers within 1000	1 week
	Subtract 3-digit numbers within 1000	1 week
	Review skip-counting	1 day
Enduring Understanding	Essential Questions	
<ul style="list-style-type: none"> • 10 Ones can be regrouped as 1 Ten • Standard Algorithm for addition breaks numbers into simpler numbers. • All sums and differences can be found using models or cubes • Several strategies can be used to solve problems paper/pencil, mental math, manipulatives, number line or Hundreds Chart • Numbers can be added in any order to come up with the same sum 	<ul style="list-style-type: none"> • Which strategy works best for me when solving larger addition and subtraction problems? • How can estimation help me solve problems? • Can knowing how to add and subtract correctly help me in the real world? • How can place value or using place value blocks help me solve for addition and subtraction? 	
Differentiation and Accommodations	District/School Primary and Supplementary Resources	

- Provide graphic organizers
- Provide additional examples and opportunities for additional problems for repetition
- Provide tutoring opportunities
- Provide retesting opportunities after remediation (up to teacher and district discretion)
- Teach for mastery not test
- Teaching concepts in different modalities
- Adjust pace and homework assignments

- Go Math!!
- IXL
- Teacher created materials

Instructional Strategies

Fairfield Township School recognizes the importance of the varying methodologies that may be successfully employed by teachers within the classroom and, as a result, identifies a wide variety of possible instructional strategies that may be used effectively to support student achievement. These may include, but not be limited to, strategies that fall into categories identified by the Framework for Teaching by Charlotte Danielson:

- Communicating with students
- Using questioning and discussion techniques
- Engaging students in learning
- Using assessment in instruction
- Demonstrating Flexibility and Responsiveness

Common Misconceptions

Proper Conceptions

- When objects are in 2 groups to see even or odd, students don't know what to do once the groups are divided
- When determining if a two digit number is even or odd, students compare the numbers in the tens place
- In word problems children have difficulty choosing the operation
- Students have difficulty skip counting when starting at the beginning of a sequence
- Students are not sure when to regroup
- Students are not sure how to record the new numbers once they regroup
- Students add or subtract in the tens column first
- Students mix up tens and ones when counting place value blocks or visuals of tens and ones
- Students place numbers the wrong spots on the place value charts
- Dependency on clue words in story problems
- Students confuse rows and columns in arrays
- Students incorrectly draw arrays for the given groups
- Students reverse the numbers when recording the number of rows and columns

- The group with one left over is odd and the group with none left over is even
- Dividing the ones into two equal groups will help to determine if a multidigit number is even or odd
- Acting out or explaining the story and deciding if you are taking away from a group or putting two groups together helps to “see” the problem
- A hundreds chart and number lines can help to skip count by 2's, 5's and 10's
- Using place value blocks and cubes can help us to see when to regroup
- Connecting place value blocks and cubes show the connection to the written number
- Steps to adding and subtracting 2 and 3 digit numbers start in the ones column
- Count and say out loud the tens first, then count the ones
- Reading and using labels on Place Value Charts help us organize numbers correctly
- Visualizing, acting out, or drawing the word problems help to “see” the problem
- Columns are up and down. Rows go across
- Arrays are equal groups of rows and columns. Graph paper can help us to organize rows and columns.
- The # of rows is the first number in the equation, the # in each row is the second

Performance Task

A group of friends is sharing and collecting stickers. They got together to trade. This is how many each boy/girl collected so far.

- Who has the largest sticker collection?
- Who has the smallest sticker collection?
- What is the difference between the largest and the smallest sticker collections?
- If you have more stickers than Jamie and less than Thomas, how many could you have? (Answers will vary)
- Find the total number of stickers that Rico, Carla and Jamie have.
- How many more stickers does Rico need to have the same amount as Carmen?

Name	Number of Stickers
Rico	60
Carmen	92
Jamie	19
Thomas	64
Carla	37

RUBRIC – EACH ITEM/bullet IS WORTH ½ POINT FOR A TOTAL OF 3 POINTS

Unit 3 Grade 2 - Measurement		
Content & Practice Standards		Transfer
<ul style="list-style-type: none"> • 2.MD.A.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and 	MP.5 Use appropriate tools strategically.	Concept(s): No new concept(s) introduced Students are able to:

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<p>measuring tapes.</p>	<p>MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> measure lengths of objects using rules, yardsticks, meter sticks and measuring tapes. <p>Learning Goal 1: Estimate lengths of objects and measure lengths of objects using appropriate tools.</p>
<ul style="list-style-type: none"> 2.MD.A.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> measure the length of an object using different units of measure. compare the measurements and explain how they relate to each unit. <p>Learning Goal 2: Compare measurements of an object taken with two different units of measure and describe how the two measurements relate to the size of the unit chosen.</p>
<ul style="list-style-type: none"> 2.MD.A.3. Estimate lengths using units of inches, feet, centimeters, and meters 	<p>MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> estimate lengths of objects. <p>Learning Goal 1: Estimate lengths of objects and measure lengths of objects using appropriate tools.</p>
<ul style="list-style-type: none"> 2.MD.A.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 	<p>MP.5 Use appropriate tools strategically. MP.6 Attend to precision.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> Measure objects, comparing to determine how much longer one object is than another. Express the difference in length in terms of a standard unit of measure. <p>Learning Goal 3: Compare lengths of two objects and determine how much longer one object is than the other using a standard unit of measure.</p>
<ul style="list-style-type: none"> 2.MD.B.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, 	<p>MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p>

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<p>e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem <i>example, if Angela needs 30 feet of ribbon for gifts, but she only has 17 feet, number sentences $17 + \square = 30$ and $30 - \square = 17$ both represent the situation and \square represents the number of feet of ribbon that she still needs.</i></p>	<p>quantitatively. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically.</p>	<ul style="list-style-type: none"> • add and subtract, within 100, to solve word problems involving lengths (lengths are given in the same units). • use drawings to represent the problem. • use number sentences with a symbol for the unknown to represent the problem. <p>Learning Goal 4: Add and subtract within 100 to solve word problems involving lengths using a symbol to represent the unknown number.</p>
<ul style="list-style-type: none"> • 2.MD.B.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. 	<p>MP.4 Model with mathematics. MP 2 Reason abstractly and quantitatively. MP.5 Use appropriate tools strategically.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> • use equally spaced points of a number line to represent whole numbers as lengths from 0. • represent whole number sums within 100 on a number line diagram. • represent whole number differences within 100 on a number line diagram. <p>Learning Goal 5: Use a number line to represent the solution of whole number sums and differences related to length within 100.</p>
<ul style="list-style-type: none"> • 2.MD.C.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. 	<p>MP.5 Use appropriate tools strategically. MP.6 Attend to precision.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> • use analog and digital clocks, tell time to the nearest five minutes using a.m. and p.m. • use analog and digital clocks, write time to the nearest five minutes using a.m. and p.m. <p>Learning Goal 6: Tell and write time using analog and digital clocks to the nearest five minutes using a.m. and p.m.</p>
<ul style="list-style-type: none"> • 2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked) 	<p>MP 2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> • count within 1000 by ones. • count within 1000 by fives, tens, and hundreds beginning at any multiple of 5, 10,

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	MP.8 Look for and express regularity in repeated reasoning.	or 100. Learning Goal 7: Orally count within 1000 including skip-counting by 5s, 10s, and 100s
<ul style="list-style-type: none"> 2.NBT.B.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked) 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> Place value Relationship between addition and subtraction Properties of Operations Students are able to: <ul style="list-style-type: none"> add and subtract within 100 using place value strategies. add and subtract within 100 using properties of operations and the relationship between addition and subtraction. Learning Goal 8: Select and use a strategy (place value, properties of operation, and/or the relationship between addition and subtraction) to add and subtract within 100.

District/School Formative Assessment Plan		District/School Summative Assessment Plan	
<ul style="list-style-type: none"> Teacher-Created Assessments Homework Classwork UDL's whiteboard activities IXL Problem of the Day Exit Ticket 		<ul style="list-style-type: none"> Chapter Tests Unit Tests EdConnect Assessments 	
Focus Mathematical Concepts			
Vocabulary		Instruction and Pacing	
Equal Unit Length Inch Height Meter Nearest centimeter Foot Yard Place Value Ones Tens Hundreds Thousands Compose Operations Addition Subtraction Addends Sum Difference Skip Count Table Arrange Equals Match Measure Longer than Shorter than Mental Math ruler yardstick meterstick measuring tape number line		Pretest	1 day
		Measure lengths of objects with various tools	1 week
		Measure the length twice, using 2 different units; analyze and compare	1 week
		Estimate lengths	1 week
		Compare the lengths of 2 different objects	1 week

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Time minutes analog clock am pm	Add and subtract to solve length word problems	2 weeks
	Lengths on number lines	1 week
	Time on analog clocks	1 week
	Review skip counting within 1000 and adding/subtraction within 100	1 week
Enduring Understanding		Essential Questions
<ul style="list-style-type: none"> You can estimate the length of an object by using standard units of measure and objects can be measured to find their actual length. Objects lengths can be compared and measured to find which is greater. 	<ul style="list-style-type: none"> How do we decide which unit of measurement to use? Which unit of measure should I use to measure an object? Which operation or strategy will I use to solve a problem 	
Differentiation and Accommodations		District/School Primary and Supplementary Resources
<ul style="list-style-type: none"> Provide graphic organizers Provide additional examples and opportunities for additional problems for repetition Provide tutoring opportunities Provide retesting opportunities after remediation (up to teacher and district discretion) Teach for mastery not test Teaching concepts in different modalities Adjust pace and homework assignments 	<ul style="list-style-type: none"> Go Math!! IXL Teacher created materials 	
Instructional Strategies		
<p>Fairfield Township School recognizes the importance of the varying methodologies that may be successfully employed by teachers within the classroom and, as a result, identifies a wide variety of possible instructional strategies that may be used effectively to support student achievement. These may include, but not be limited to, strategies that fall into categories identified by the Framework for Teaching by Charlotte Danielson:</p> <ul style="list-style-type: none"> Communicating with students Using questioning and discussion techniques Engaging students in learning Using assessment in instruction Demonstrating Flexibility and Responsiveness 		
Common Misconceptions		Proper Conceptions
<ul style="list-style-type: none"> Students make errors in measuring Students have difficulty estimating measurement Students lose count or cannot track when measuring 	<ul style="list-style-type: none"> Line up “end to end” when measuring objects to align Using an anchor or benchmark can help with estimating for measurement Marking and writing down measurements help you keep track 	

<ul style="list-style-type: none"> • Students become confused when the measurement falls between two numbers • Students confuse inches/centimeters on a ruler 	<ul style="list-style-type: none"> • Use the number that is closer to the “end” of the object • Inches are larger than centimeters. Before measuring always find the correct side of the ruler marked cm. or in.
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Performance Task

Real World Measurement Activities utilizing Standard and Metric Systems of Measurement

- Students will estimate the length of their classroom to the nearest meter and to the nearest foot.
- Students will work with a partner to measure the length of their classroom using a meter stick to find metric length in meters.
- Students will work with a partner to measure the length of their classroom using a ruler to find standard length in feet.
- Students will estimate the length of classroom door to the nearest meter and to the nearest foot.
- Alternate task students can measure the length of their desk in centimeters.
- Alternate task students can measure the length of their desk in inches.
- Students will explain which unit of measure needed more units to measure the room and why.
- Given the height of the classroom door to the nearest foot, find the difference between the length of the classroom and the height of the door.

Item Measured	Estimate in Meters	Actual Measurement in Meters	Estimate in Feet	Actual Measurement in Feet
Length of Classroom				
Height of Classroom Door				
Distance to the Water Fountain				

ALTERNATE OR ADDITIONAL TASK

Item Measured	Estimate in centimeters	Actual Measurement in centimeters	Estimate in inches	Actual Measurement in inches
Length of Desk				
Width of desk chair				
Length of their shoe				

Rubric

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- 3 points - The student’s estimate in feet is greater than his/her estimate in meters. The student’s measurement of the classroom’s length is within 1 meter or 2 feet, explains that it takes more feet to measure the classroom, because meters are a larger unit, correctly finds the difference between the length of the room and height of the door in feet and writes a sentence for their answer.
- 2 points - Student makes an estimate of the length of the room in feet and meters and measurement of the classroom is within 2 meters or 4 feet. The student states that it takes more feet than meters to measure the classroom, but his/her explanation is not clear. The student correctly finds the difference between the length of the room and the height of the door/or makes a computation mistake and answers the question in a sentence.
- 1 point - The student estimates the length of the classroom in meters or feet and measurement of the classroom is within 2 meters or 6 feet. The student states that it takes more feet or meters to measure the classroom and it either lacks an explanation or their reasoning is unclear. The student attempts to solve a subtraction problem to find the difference between the length of the room and the height of the door, or they correctly solve an addition problem.
- 0 points - The student lacks an estimate for the length of the room. And does not complete any of the tasks correctly or has no response at all

Unit 4 Grade 2 – Reason with shapes and represent data		
Content & Practice Standards		Transfer
<ul style="list-style-type: none"> • 2.G.A.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. 	MP.2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: <ul style="list-style-type: none"> • draw shapes having specified attributes (e.g. number of equal faces, number of angles) • identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Learning Goal 1: Draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
<ul style="list-style-type: none"> • 2.G.A.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, 	MP.4 Model with mathematics. MP.7 Look for and make use of structure.	Concept(s): <ul style="list-style-type: none"> • Equal shares of identical wholes need not have the same shape. Students are able to: <ul style="list-style-type: none"> • partition rectangles into two, three, or four equal shares.

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<p>four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>		<ul style="list-style-type: none"> partition two same-sized rectangles to show that equal shares of identical wholes need not have the same shape. describe the shares using the words halves, thirds, fourths, half of, a third of, a fourth of, etc. recognize and then describe the whole as two halves, three thirds, four fourths. <p>Learning Goal 2: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc. and describe the whole as two halves, three thirds, and four fourths.</p>
<ul style="list-style-type: none"> 2.MD.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i> 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Know the value of dollar bills, quarters, dimes, nickels, and pennies. <p>Students are able to:</p> <ul style="list-style-type: none"> identify dollar bills, quarters, dimes, nickels, and pennies. using dollar bills, quarters, dimes, nickels, and pennies, count to determine the total amount of money. solve word problems involving dollar bills, quarters, dimes, nickels, and pennies. <p>Learning Goal 3: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using the \$ and ¢ symbols appropriately.</p>
<ul style="list-style-type: none"> 2.MD.D.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. 	<p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Generate data. <p>Students are able to:</p> <ul style="list-style-type: none"> generate measurement data by measuring lengths, to the nearest whole unit, of several objects or by making repeated measurements of the same object. record the measurements in a line plot having a horizontal scale in whole number units. <p>Learning Goal 4: Use tools of measurement to measure lengths of several objects to the nearest whole unit and represent the data on a line plot with appropriate whole number units on the horizontal scale.</p>

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<ul style="list-style-type: none"> 2.MD.D.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple problems by putting together, taking apart, and comparing problems using information presented in a bar graph. 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> draw a picture graph to represent a data set with up to four categories. draw a bar graph to represent a data set with up to four categories. use information in a bar graph to solve simple put together, take apart, and compare problems. <p>Learning Goal 5: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in the graph.</p>
<ul style="list-style-type: none"> 2.OA.B.2. Fluently add and subtract within 20 using mental strategies. <i>End of Grade 2, know from memory all sums of two one-digit numbers.</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> add <u>within 20</u> using mental strategies with accuracy and efficiency. subtract <u>within 20</u> using mental strategies with accuracy and efficiency. <p>Learning Goal 6: Fluently add and subtract <u>within 20</u> using mental strategies.</p>
<ul style="list-style-type: none"> 2.NBT.B.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> with accuracy and efficiency, add and subtract within 100 using place value strategies, properties of operations and/or the relationship between addition and subtraction. <p>Learning Goal 7: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>

District/School Formative Assessment Plan	District/School Summative Assessment Plan
<ul style="list-style-type: none"> Teacher-Created Assessments 	<ul style="list-style-type: none"> Chapter Tests

<ul style="list-style-type: none"> ● Homework ● Classwork ● UDL's ● whiteboard activities ● IXL ● Problem of the Day ● Exit Ticket 	<ul style="list-style-type: none"> ● Unit Tests ● EdConnect Assessments
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Focus Mathematical Concepts

Vocabulary	Instruction and Pacing	
Angle face triangles quadrilaterals pentagons hexagons cubes Rectangle half halves thirds fourth dollar bill penny nickel dime quarter \$ line plot bar graph circle picture graph	Pretest	1 day
	Recognize and draw shapes	2 weeks
	Partition rectangles and circles	2 weeks
	Money word problems	1 week
	Line plot	1 weeks
	Bar graph	1 week
	Picture graph	1 week
	Review adding and subtracting	1 week
Enduring Understanding	Essential Questions	
<ul style="list-style-type: none"> ● Two and three dimensional objects can be described, classified, and analyzed by their attributes. ● Identical wholes can be partitioned in various ways and still be identified as equal shares. ● Data can be collected and represented using various tables, charts, and graphs chosen appropriately. ● Three digit numbers can be added and subtracted using a variety of strategies 	<ul style="list-style-type: none"> ● How would you describe or classify a given object? ● What ways can you divide a given shape into equal shares? ● How should you show your data using a chart, table, or graph? ● What is a strategy used to add or subtract three digit numbers 	
Differentiation and Accommodations	District/School Primary and Supplementary Resources	
<ul style="list-style-type: none"> ● Provide graphic organizers ● Provide additional examples and opportunities for additional problems for repetition ● Provide tutoring opportunities ● Provide retesting opportunities after remediation (up to teacher and district discretion) ● Teach for mastery not test ● Teaching concepts in different modalities 	<ul style="list-style-type: none"> ● Go Math!! ● IXL ● Teacher created materials 	

- Adjust pace and homework assignments

Instructional Strategies

Fairfield Township School recognizes the importance of the varying methodologies that may be successfully employed by teachers within the classroom and, as a result, identifies a wide variety of possible instructional strategies that may be used effectively to support student achievement. These may include, but not be limited to, strategies that fall into categories identified by the Framework for Teaching by Charlotte Danielson:

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- Using questioning and discussion techniques
- Engaging students in learning
- Using assessment in instruction
- Demonstrating Flexibility and Responsiveness

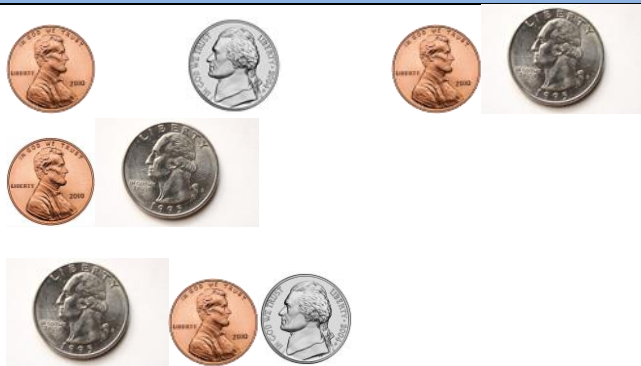
Common Misconceptions

- Students have difficulty visualizing all sides of solid
- A sphere has one flat surface
- Different shaped rectangles are altogether different shapes
- Students lose track when counting sides
- Students have difficulty dividing shapes into equal parts
- All halves and fourths are the same size
- Students have difficulty remembering all of the names of solid/plane shapes
- Students have difficulty with basic addition and subtraction facts
- Students add in the tens column before the ones column
- Data – students incorrectly use tally marks
- Students have difficulty determining which item is the most on a Bar/Picture Graph

Proper Conceptions

- Using objects the everyday world can help us see attributes of solid figures
- A Sphere has one curved surface
- Shapes can be different sizes but the same shape
- Mark or track the sides of objects when counting sides
- Divide shapes in half first, then see if it can be divided again equally.
- A half is equal to two equal parts and fourths are four equal parts divided
- Shapes have a mathematical name to distinguish their attributes
- Continually practicing addition and subtraction helps in all areas of math
- Steps for add/sub help us to add and subtract correctly
- Grouping tallies by 5's helps us to keep track of the number correctly
- The row that is the longest or most pictures has the most

Performance Task



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Given the coins above, create a bar graph that correctly represents the data.

Rubric: 3 points - Correctly labeling the x and y axis of the bar graph, and all 3 bars are correct 2 points – 2 out of 3 items are correct

1 point – 1 out of 3 items is correct

0 points – nothing correct