Audubon Public Schools
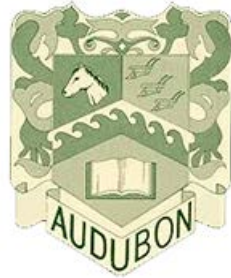
Grade 2: Math

Curriculum Guide

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Course Description

Grade 2: Math

In second grade, students refine their understanding of the base ten system and use place value concepts of ones, tens, and hundreds to understand number relationships. They become fluent in writing and renaming numbers in a variety of ways. Students focus on what it means to add and subtract as they become fluent with single-digit addition and subtraction facts and develop addition and subtraction procedures for two-digit numbers. Students make sense of the procedures by building on what they know about place value and number relationships and putting together and taking apart sets of objects. Students will tell time on different types of clocks, as well as identify coins and determine the value of a collection of coins. Students make predictions and answer questions about data as they apply their growing understanding of numbers and the operations of addition and subtraction. Students understand the process of measuring length and progress from measuring with objects such as toothpicks and craft sticks to the more practical skill of measuring length with standard units and tools.

Overview / Progressions

Overview	Standards for Mathematical Content	Unit Focus	Standards for Mathematical Practice
Unit 1 ● Addition and Subtraction Concepts ● Number Patterns ● Money	● 2.OA.A.1* ● 2.OA.B.2* ● 2.NBT.A.2* ● 2.OA.C.3 ● 2.OA C 4 ● 2.NBT.A.2 ● 2.MDC.8	● Use place value understanding and properties of operations to add and subtract ● Represent and solve problems involving addition and subtraction ● Add and subtract within 20 ● ·Understand place value ● Work with equal groups of objects to gain foundations for multiplication ● Skip count within 1000 ● Work with money	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments & critique the reasoning. of others.
Unit 2 ● Time ● Place Value ● Add 2 Digit Numbers ● Subtract 2 digit numbers	● 2.NBT.A.1 ● 2.NBT.A.1a ● 2.NBT.A.1b ● 2.NBT.A.3 ● 2.NBT.A.4 ● 2.OA.A.1	● Understand place value ● Use place value understanding and properties of operations to add and subtract	MP.4 Model with mathematics.

	● 2.NBT.B.5 ● 2.NBT.B.6 ● 2.NBT.B.9 ● 2.MD.C.7	● Represent and solve problems involving addition and subtraction ● Work with time	MP.5 Use appropriate tools strategically.. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.
Unit 3 ● Add 3 digit numbers ● Subtract 3 digit numbers ● Data Analysis ● Geometric Shapes ● Equal Shares ● Measurement	● 2.NBT.B.7 ● 2.NBT.B.8 ● 2.NBT.B.9 ● 2.MD.D.9 ● 2.MD.D.10 ● 2.G.A.1 ● 2.G.A.2 ● 2.G.A.3 ● 2.MD.A.1 ● 2.MD.A.2 ● 2.MD.A.3	● Use place value understanding and properties of operations to add and subtract ● Represent and interpret data ● Reason with shapes and their attributes ● Measure and estimate lengths in standard units	

	● 2.MD.A.4 ● 2.MD.B.5	● Relate addition and subtraction to length	

Subject: Math	Grade: 2	Unit: 1 ● **Addition and subtraction concepts** ● **Number Patterns** ● **Money** **Odd or Even**	1ˢᵗ **Trimester** **(See calendar for specific months)**
Content Standards	**Suggested Standards for Mathematical Practice**	**Critical Knowledge & Skills**	

Content Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
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	MP.1 Make sense of problems and persevere in solving them. MP 2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ● 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. Learning Goal 1: Add and subtract within 20 to solve 1- and 2-step word problems with unknowns in any position.
2.OA.B.2. Fluently add and subtract within 20 using mental strategies.	MP 2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express	Concept(s): No new concept(s) introduced Students are able to: ● add within 10 using mental strategies with accuracy and efficiency. ● subtract within 10 using mental strategies with accuracy and efficiency.

By end of Grade 2, know from memory all sums of two one-digit numbers. *(benchmarked)	regularity in repeated reasoning	Learning Goal 2: Fluently add and subtract within 10 using mental strategies.
2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(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): No new concept(s) introduced Students are able to: ● count by fives within 1000. ● count by tens within 1000. ● count by hundreds within 1000. Learning Goal 5: Skip count by 5s and 10s up to 100...beginning at any multiple of 5.
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	MP 2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning	Concept(s): Even: groups having even numbers of objects will pair up evenly. Odd: groups having odd numbers of objects will not pair up evenly. Students are able to: ● 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. Learning Goal 3: Write an equation to express an even number as a sum of two equal addends.

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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 equation to express the total as a sum of equal addends	MP 2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): Arrays as arrangements of objects. Students are able to: ● 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. Learning Goal 4: Use addition to find the total number of objects arranged in rectangular
2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(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): No new concept(s) introduced Students are able to: ● count within 1000 by ones. ● count within 1000 by fives, tens, and hundreds beginning at any multiple of 5, 10, or 100. 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).

2.MD.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*	MP.1 Make sense of problems and persevere in solving them. MP 2 Reason abstractly and quantitatively. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): Know the value of dollar bills, quarters, dimes, nickels, and pennies. Students are able to: - 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. Learning Goal 3: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using the $ and ¢ symbols appropriately

Formative Assessments	Summative Assessments
- Observation in whole group - Slate work - Observations in math groups - Math Notebooks/ Problem solving - Daily workbook practice - Plickers	- Check My Progress Assessments - Unit Tests - Vocabulary assessments - End of trimester assessments - Fact assessments - MAP Testing
Suggested Primary Resources	**Suggested Supplemental Resources**

My Math- Ch 1, 2, 8	- Number sense skill builders- RekenReks; Using number grid; math fact cards - Games for addition/ subtraction- Top It; Addition Top It; Ladybug Doubles Game; 3 Addends Game; Rolling to 100; Around the World ; Salute; - Part, part, total wipe off mats; number bonds wipe off mat; - Anchor charts- making 10; doubles facts - Arrays- Array puzzles, Ideas for teaching arrays - Technology games- xtramath.org; IXL; Arcedemics; - Ipad and Google Tablet apps - Math Slicer, Mummy Math, Squeebles, Sushi Monster, Math Blaster, Math Zombies, Math Museum, Amazing Coin, My Piggy Bank - Stem- Making the longest chain of paper; building with cubes and popsicle sticks - Money games- Coin Exchange Game (Everyday Math); Coin Top It - PMI- Money resources as needed - CGI/ problem solving questions - Math word wall

Cross-Curricular Connections & 21st Century Skills

- Math read alouds- Two Ways to Count to Ten by Ruby Dee, One Hundred Ways to Get to 100 by Jerry Pallotta, Subtraction Action by Loreen Leedy, 12 Ways to get to 11 by Eve Merriam, Double the Ducks by Stuart J. Murphy, Math Fables by Greg Tang, Animals on Board by Stuart J. Murphy, Spunky Monkeys on Parade by Stuart J. Murphy, Quack and Count by Keith Baker
- YouTube videos- Doubles; When you subtract with a pirate;
- Writing in math notebooks to explain thinking (in response to open ended problems)
- STEM activities
- Scrabble Word Work Game - Children spell words then add up the value on the scrabble tiles. Player with highest total wins

- RollSumSpelling.pdf - Addition and spelling game - located in 2nd Grade Math Resources website

Essential Questions	Enduring Understanding
- How can I solve one and two step word problems? - How can I memorize one and two digit sums within 20? - How can I recognize whether groups have an odd or even number? - How can I add using an array? - How can I count using fives, tens, and one hundreds, within 1000? - What do I need to know to solve word problems about money?	- I can solve one or two step problems by using addition and/or subtraction. - I can memorize by practicing. - I can recognize odd or even numbers in a group by s.pairing objects. - I can create an array by arranging objects in rows and columns. - I can recognize skip counting patterns when counting by fives, tens, and one hundreds within 1000. - I can recognize odd or even numbers in a group by pairing objects. - I need to understand and know the value of dollars, quarters, dimes, nickels and pennies in order to solve money problems

Differentiation		
504	- preferential seating - extended time on tests and assignments - reduced homework or classwork - verbal, visual, or technology aids	- modified textbooks or audio-video materials - behavior management support - adjusted class schedules or grading - verbal testing
Enrichment	- Utilize collaborative media tools - Provide differentiated feedback - Opportunities for reflection	- Encourage student voice and input - Model close reading - Distinguish long term and short term goals

IEP	- Utilize "skeleton notes" where some required information is already filled in for the student - Provide access to a variety of tools for responses - Provide opportunities to build familiarity and to practice with multiple media tools - Graphic organizers	- Leveled text and activities that adapt as students build skills - Provide multiple means of action and expression - Consider learning styles and interests - Provide differentiated mentors
ELLs	- Pre-teach new vocabulary and meaning of symbols - Embed glossaries or definitions - Provide translations - Connect new vocabulary to background knowledge	- Provide flash cards - Incorporate as many learning senses as possible - Portray structure, relationships, and associations through concept webs - Graphic organizers
At-risk	- Purposeful seating - Counselor involvement - Parent involvement	- Contracts - Alternate assessments - Hands-on learning

21st Century Skills

- Creativity - Innovation - Critical Thinking	- Problem Solving - Communication - Collaboration

Integrating Technology

● Chromebooks ● Internet research ● Online programs	● Virtual collaboration and projects ● Presentations using presentation hardware and software

Subject: Math	Grade: 2	Unit 2: ● **Addition and subtraction concepts** ● **Number Patterns** ● **Time**	**2nd Trimester (See calendar for specific months)**
Content Standards	**Suggested Standards for Mathematical Practice**	**Critical Knowledge & Skills**	
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:	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): ● 100 can be thought of as a bundle of ten tens — called a *hundred.* ● 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 *tens* and 0 *ones*). Students are able to:	

2.NBT.A.1.a. 100 can be thought of as a bundle of ten tens — called a "hundred."		● represent 100 as a bundle of ten *tens*. ● represent the number of *hundreds*, *tens*, and *ones* in a 3-digit number.
2.NBT.A.1.b. 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 tens and 0 ones).		Learning Goal 3: Represent a 3-digit number as specific amounts of *hundreds*, *tens*, and *ones*. Learning Goal 4: Identify ten *tens* as 100 and represent two hundred, three hundred, … nine hundred with 2, 3, …, 9 hundred bundles (with zero *tens* and zero *ones*).
2.NBT.A.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	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): ● Expanded form Students are able to: ● 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. Learning Goal 6: Read numbers to 1000 using base-ten numerals, number names, and expanded form. Learning Goal 7: Write numbers to 1000 using base-ten numerals, number names, and expanded form.

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.	MP 2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): ● Place value Students are able to: ● use the number of the hundreds, tens and/or ones digits to compare two three-digit numbers. ● write the results of the comparison using >, =, or <. 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).
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)	MP.1 Make sense of problems and persevere in solving them. MP 2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ● 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. Learning Goal 1: Add and subtract within 100 to solve 1- and 2-step word problems with unknowns in any position.

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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): No new concept(s) introduced Students are able to: ● 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. 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.
2.NBT.B.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	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): No new concept(s) introduced Students are able to: ● 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.

		Learning Goal 7: Add up to four two -digit numbers using strategies based on place value and properties of operations.
2.NBT.B.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.	MP 2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ● 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. Learning Goal 9: After applying addition and subtraction strategies based on place 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)].
2.MD.C.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): No new concept(s) introduced Students are able to: ● 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.

		Learning Goal 6: Tell and write time using analog and digital clocks to the nearest five minutes using a.m. and p.m

Formative Assessments	Summative Assessments
● Observation in whole group ● Slate work ● Observations in math groups ● Math Notebooks/ problem solving ● Daily workbook practice ● Plickers	● Check My Progress Assessment ● Unit Tests ● Vocabulary assessments ● End of trimester assessments ● Fact assessments ● MAP Testing
Suggested Primary Resources	**Suggested Supplemental Resources**
My Math Chapters 10, 5, 3, 4	● PMI- Telling time resources as needed ; Units for adding and subtracting 2 digit numbers to introduce the concepts ● Games- Telling time games; Place Value- Base Ten Exchange; face practice games ● Online games- Sheppard Software; xtramath.org; IXL; Arcademics; ● Youtube- AM/ PM video; ● Ipad and Google Tablet apps - Thinking Blocks, Missing Numbers, Cookie Factory; Mr. Wolf, Telling Time, TT Clock ● STEM- Make an igloo out of base ten blocks- estimate and count total value of blocks; ● Manipulatives- Base Ten Blocks/ place value mat; individual or class number grids to 1000 ● 100th day of school activities/ STEM- hopping, jumping, etc in 100 seconds, making a pyramid with 100 cups, flipping a coin and rolling a die 100 times,

	● Valentine STEM- making a heart with cups, stacking Sweethearts; 'flying' Cupid
	● Dr. Seuss Stem-
	● CGI/ problem solving questions

Cross-Curricular Connections & 21st Century Skills
● Math read alouds- <u>What Time is it Mr. Crocodile?</u> by Judy Sierra, <u>Clocks and More Clocks</u> by Pat Hutchins, <u>Hickory, Dickory, Dock</u> by Robin Muller and Suzanne Duranceau, <u>Math Fables</u> by Greg Tang,
● YouTube videos- Doubles; When you subtract with a pirate;
● Writing in math notebooks to explain thinking (in response to open ended problems)
● Dr. Seuss Stem- reading, writing, science components

Essential Questions	**Enduring Understanding**
● What is place value in three digit numbers? ● What kind of bundles does 100 represent? ● How can I read and write numbers to 1000? ● How can I compare three digit numbers? ● How can I easily add and subtract within 900? ● What are the ways I can add and subtract within 1000? ● How can I solve one and two step word problems?	● A 3 digit number contains a digit in the hundreds place, the tens place and the ones place. ● One hundred (100) is a bundle of ten tens or 100 ones. ● I can read and write numbers to 1000, using digits, , number words and expanded form. ● I can compare two three digit numbers based on meanings of the hundreds, tens and ones digits, using >,=, and < symbols. ● I can use concrete models, or drawing and the following strategies to add within 100: place value, properties of operations and the relationship between adding and subtracting ● I can use my knowledge of place value to add and subtract within 1000. ● I can solve one or two step problems by using addition and/or subtraction.

Differentiation

504	● preferential seating ● extended time on tests and assignments ● reduced homework or classwork ● verbal, visual, or technology aids	● modified textbooks or audio-video materials ● behavior management support ● adjusted class schedules or grading ● verbal testing
Enrichment	● Utilize collaborative media tools ● Provide differentiated feedback ● Opportunities for reflection ●	● Encourage student voice and input ● Model close reading ● Distinguish long term and short term goals
IEP	● Utilize "skeleton notes" where some required information is already filled in for the student ● Provide access to a variety of tools for responses ● Provide opportunities to build familiarity and to practice with multiple media tools ● Graphic organizers	● Leveled text and activities that adapt as students build skills ● Provide multiple means of action and expression ● Consider learning styles and interests ● Provide differentiated mentors
ELLs	● Pre-teach new vocabulary and meaning of symbols ● Embed glossaries or definitions ● Provide translations ● Connect new vocabulary to background knowledge	● Provide flash cards ● Incorporate as many learning senses as possible ● Portray structure, relationships, and associations through concept webs ● Graphic organizers
At-risk	● Purposeful seating ● Counselor involvement ● Parent involvement	● Contracts ● Alternate assessments ● Hands-on learning

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21st Century Skills	
- Creativity - Innovation - Critical Thinking	- Problem Solving - Communication - Collaboration
Integrating Technology	
- Chromebooks - Internet research - Online programs	- Virtual collaboration and projects - Presentations using presentation hardware and software

Subject: Math	Grade: 2	Unit 3: **Addition and subtraction concepts** **Number Patterns** **Place Value Strategies for Addition and Subtraction** **Measurement, Data, and Shapes)**	3rd Trimester (See calendar for specific months)

Content Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
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.	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): ● Place value: Students are able to: ● 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. Learning Goal 9: Mentally add or subtract 10 or 100 from any given number between 100 and 900.
2.G.A.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	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: ● partition a rectangle into rows and columns of same-size squares and count to find the total number. Learning Goal 5: Partition a rectangle into rows and columns of same-size squares and count to find the total number.

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.	MP 2 Reason abstractly and quantitatively. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): ● 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. Students are able to: ● 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. 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.
2.MD.A.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.	Concept(s): No new concept(s) introduced Students are able to: ● measure lengths of objects using rules, yardsticks, meter sticks and measuring tapes. Learning Goal 1: Estimate lengths of objects and measure lengths of objects using appropriate tools.

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.	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.	Concept(s): No new concept(s) introduced Students are able to: ● measure the length of an object using different units of measure. ● compare the measurements and explain how they relate to each unit. 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.
2.MD.A.3. Estimate lengths using units of inches, feet, centimeters, and meters	MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.	Concept(s): No new concept(s) introduced Students are able to: ● estimate lengths of objects Learning Goal 1: Estimate lengths of objects and measure lengths of objects using appropriate
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.	MP.5 Use appropriate tools strategically. MP.6 Attend to precision	Concept(s): No new concept(s) introduced Students are able to: ● 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.
		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.
2.MD.B.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem *For example, if Angela needs 30 feet of ribbon for gifts, but she only has 17 feet, number sentences 17 + □ = 30 and 30 - □ = 17 both represent the situation and □ represents the number of feet of ribbon that she still needs.*	MP.1 Make sense of problems and persevere in solving them. MP 2 Reason abstractly and quantitatively. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically.	Concept(s): No new concept(s) introduced Students are able to: ● 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. Learning Goal 4: Add and subtract within 100 to solve word problems involving lengths using a symbol to represent the unknown number.
2.MD.B.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the	MP.4 Model with mathematics.	Concept(s): No new concept(s) introduced Students are able to:

numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	MP 2 Reason abstractly and quantitatively. MP.5 Use appropriate tools strategically.	● 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. Learning Goal 5: Use a number line to represent the solution of whole number sums and differences related to length within 100.
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: ● 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.
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, four fourths. Recognize that equal	MP.4 Model with mathematics. MP.7 Look for and make use of structure.	Concept(s): ● Equal shares of identical wholes need not have the same shape. Students are able to: ● partition rectangles into two, three, or four equal shares. ● partition two same-sized rectangles to show that equal shares of identical wholes need not have the same shape.

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. 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.
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.	MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): - Generate data. Students are able to: - 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. Learning Goal 4: Use tools of measurement to measure lengths of several objects to the nearest
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	MP.1 Make sense of problems and persevere in solving them.	Concept(s): No new concept(s) introduced Students are able to:

put together, take-apart, and compare problems using information presented in a bar graph.	MP 2 Reason abstractly and quantitatively. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.8 Look for and express regularity in repeated reasoning.	• 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. 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.

Formative Assessments	Summative Assessments
• Observation in whole group • Slate work • Observations in math groups • Math Notebooks/ problem solving • Daily workbook practice	• Check My Progress Assessment • Unit Tests • End of trimester assessments • Fact assessments • MAP Testing

Suggested Primary Resources	Suggested Supplemental Resources
My Math- Chapters 6, 7, 9, 12, 11	• PMI- as needed; Measurement resources to supplement • Games- Make My Design; • Online games- Sheppard Software; xtramath.org; IXL; Arcademics; Mathisfun.com- graph maker; • Youtube- • Ipad and Google Tablet apps • STEM- Easter STEM; Make a floating ramp; build a rollercoaster

- Manipulatives-
- Making shapes activities- using straws to build shapes, Foldable 3D shapes; folding shapes into fractions and finding area
- CGI/ problem solving questions

Cross-Curricular Connections & 21st Century Skills

- Math read alouds- The Greedy Triangle by Marilyn Burns, How Big is a Foot? by Rolf Myller, Inchworm and a Half by Elinor J. Pinnzes, Twelve Snails to One Lizard by Susan Hightower
- PlantsGraphingandWritingActivities.pdf - located in 2nd Grade Math Resources website
- Writing in math notebooks to explain thinking (in response to open ended problems)

Essential Questions	Enduring Understanding
- What kind of bundles does 100 represent? - How can I easily add or subtract by 100s within 900? - What are the ways I can add and subtract within 1000? - What unit of measurement should I use to estimate measurement? - What is the relationship between two units of measurement when measuring the same object? - What do I need to know to solve word problems involving lengths in the same unit? - 2.MD.5 - What do I need to know to solve word problems about money? - What does addition and subtraction have to do with measurement? - 2.MD.4 - How can I record measurement? - How can I record data? - How can I use a number line to find sums and differences within 100? - 2.MD.6 - What are the attributes of different shapes? - What are some shapes I should be able to identify? - How can I partition a circle or a rectangle?	- One hundred (100) is a bundle of ten tens or 100 ones. - I can use concrete models, or drawing and the following strategies to add within 100: place value, properties of operations and the relationship between adding and subtracting - I can use my knowledge of place value to add and subtract within 1000. - I can make an estimate in measurement with inches, feet, meters and centimeters. - I can measure the same object using inches and feet, and know that there are more inches than feet. - I can use addition and subtraction strategies to solve word problems involving lengths. - I need to understand and know the value of dollars, quarters, dimes, nickels and pennies in order to solve money problems - I can find the difference in the size of objects by using addition or subtraction. - Measurement can be recorded in inches, feet, meters, and centimeters. - I can use a line plot, picture graph, or bar graph to record data collected. - I can use a portion of a number line to find sum and differences within 100. - Attributes of shapes include sides, angles, faces , edges and vertices. - I can identify triangles, quadrilaterals, pentagons, hexagons and cubes.. - Circles and rectangles can be partitioned in halves, thirds, and fourths, which create equal shares of the whole.

	Equal shares of a circle or rectangle do not necessarily have the same size and shape.

Differentiation		
504	● preferential seating ● extended time on tests and assignments ● reduced homework or classwork ● verbal, visual, or technology aids	● modified textbooks or audio-video materials ● behavior management support ● adjusted class schedules or grading ● verbal testing
Enrichment	● Utilize collaborative media tools ● Provide differentiated feedback ● Opportunities for reflection ●	● Encourage student voice and input ● Model close reading ● Distinguish long term and short term goals
IEP	● Utilize "skeleton notes" where some required information is already filled in for the student ● Provide access to a variety of tools for responses ● Provide opportunities to build familiarity and to practice with multiple media tools ● Graphic organizers	● Leveled text and activities that adapt as students build skills ● Provide multiple means of action and expression ● Consider learning styles and interests ● Provide differentiated mentors

ELLs	- Pre-teach new vocabulary and meaning of symbols - Embed glossaries or definitions - Provide translations - Connect new vocabulary to background knowledge	- Provide flash cards - Incorporate as many learning senses as possible - Portray structure, relationships, and associations through concept webs - Graphic organizers
At-risk	- Purposeful seating - Counselor involvement - Parent involvement	- Contracts - Alternate assessments - Hands-on learning

21st Century Skills

- Creativity - Innovation - Critical Thinking	- Problem Solving - Communication - Collaboration

Integrating Technology

- Chromebooks - Internet research - Online programs	- Virtual collaboration and projects - Presentations using presentation hardware and software

Appendix A

Course Title: Second Grade Math   Unit Name: Operations and Algebraic Thinking
Grade Level: 2

Content Statements	NJSLS:
Representation and solving of problems involving addition and subtraction, within 100, to solve two step word problems. Fluently adding subtracting within 20, using mental strategies. Working with equal groups of objects to gain foundations for multiplication.	2.OA.1-4
Overarching Essential Questions What are one and two step word problems? What is a mental strategy? How can I analyze a group of numbers?	**Overarching Enduring Understandings** A one or two step word problem requires me to perform at least one or two operations to figure it out. A mental strategy is the way I figure out arithmetic in my head. I can analyze groups of numbers by comparing the.digits.
Unit Essential Questions How can I solve one and two step word problems? - 2.OA..1 How can I memorize one and two digit sums within 20? - 2.OA.2 How can I recognize whether groups have an odd or even number? How can I add using an array?	**Unit Enduring Understandings** I can solve one or two step problems by using addition and/or subtraction. I can memorize by practicing. I can recognize odd or even numbers in a group by s.pairing objects. I can create an array by arranging objects in rows and columns.

Grade 2 Math Curriculum Guide

Unit Rationale Understanding and being able to recognize two step word problems and odd/even totals, along with the capacity to use fundamental mental strategies to compute, lays the foundation for learning multiplication and being able to solve multi-step word problems.	**Unit Overview** Students will learn to use mental strategies to compute for word problem solving. They will become aware of the rudimentary foundation of multiplication through the process of identifying odd and even grouped numbers.

Activities:
- xtramath.org
- arcademics.com
- IXL.com - Addition and Subtraction sections - (differentiate as needed) and Properties and Mixed Operations, Counting and number patterns
- Math Journal - CGI word problems (located in binder in main HAS hallway)
- Ipad and Google Tablet apps - Math Slicer, Mummy Math, Squeebles, Sushi Monster, Math Blaster, Math Zombies, Math Museum
- Find activities in MyMath Chapter 1

Audubon Public Schools
Engaging Students ~ Fostering Achievement ~ Cultivating 21st Century Global Skills
Written By: Kim Felix, Patricia Martel, Beth Canzanese
Revised By: Roberta Ignaczewski
Approved June 2017
Course Title: Second Grade Math   Unit Name: Numbers and Operations in Base Ten
Grade Level: 2

Content Statements	NJSLS:
Understanding place value and its use in the properties of operations to add and subtract.	2.NBT, 1-9
Overarching Essential Questions What Is the place value in a 3 digit number? How can I count to higher numbers? What strategies can I use to add and subtract?	**Overarching Enduring Understandings** The place value in three digit numbers is hundreds, tens and ones. I can count to higher numbers, quickly, counting by fives, tens and hundreds I can explain why addition and subtraction strategies work, by citing place value and the properties of operations.
Unit Essential Questions What is place value in three digit numbers? - 2.NBT.1 What kind of bundles does 100 represent? - 2.NBT.8 How can I easily add or subtract by 100s within 900? - 2.NBT.8 What are the ways I can add and subtract within 1000? - 2.NBT.6 and 7 How can I count using fives, tens, and one hundreds, within 1000? - 2.NBT.2 How can I read and write numbers to 1000? - 2.NBT.3 How can I compare three digit numbers? - 2.NBT.4 How can I easily add and subtract within 900? - 2.NBT.5	**Unit Enduring Understandings** A 3 digit number contains a digit in the hundreds place, the tens place and the ones place. One hundred (100) is a bundle of ten tens or 100 ones. I can use concrete models, or drawing and the following strategies to add within 100: place value, properties of operations and the relationship between adding and subtracting I can use my knowledge of place value to add and subtract within 1000. I can recognize skip counting patterns when counting by fives, tens, and one hundreds within 1000. I can read and write numbers to 1000, using digits, , number words and expanded form.

	I can compare two three digit numbers based on meanings of the hundreds, tens and ones digits, using >,=, and < symbols. I can easily add and subtract within 900 within each place value regrouping when necessary.
Unit Rationale Understanding and using the fundamentals of place value allows students to perform multi-digit arithmetic.	**Unit Overview** Students will learn to add and subtract within 1000, by using base ten and properties of operations for addition and subtraction in order to solve word problems. They will also begin to compare three digit numbers as a basis of the multiplication process.

Activities:
- IXL - Place values, Comparing and Ordering, Counting and Number Patterns, Addition and Subtraction (2 and 3 digit)
- Find activities in MyMath - Chapter 5
- Place Value Top-it, Place Value Bingo, Place Value I Have, Who Has, Place Value board games (All can be downloaded from Pinterest and Teachers Pay Teachers)
- Digiblocks - Can be found in HAS media center
- Base 10 Exchange game (Everyday Math game)
- Math Journal - CGI word problems (located in binder in main HAS hallway)
- Ipad and Google Tablets - Thinking Blocks, Missing Numbers, Cookie Factory
- Find Poem on Internet - More on Top, No Need to Stop, More on the Floor, Go Nest Store, Numbers the same, zero's the Name

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Written By: Kim Felix, Patricia Martel, Beth Canzanese
Revised By: Roberta Ignaczewski
Approved June 2017
Course Title: Second Grade Math   Unit Name: Measurement and Data
Grade Level: 2

Content Statements	NJSLS:
Measurement of lengths in standard units. Relating addition and subtraction to length. Working with time to increments of 5 minutes. Solving word problems involving money, using symbols for dollars and cents. Generating and utilizing measurement data.	2.MD, 1-10
Overarching Essential Questions	**Overarching Enduring Understandings**
What tools do I need to measure objects? - 2.MD.1 What is estimation? How can I solve word problems involving measurement? How can I use an analog and digital clock to tell time? How can I collect, interpret, and record data? How can I solve word problems involving money?	I need rulers, yardsticks, meter sticks and measuring tapes in order to measure objects. An estimation is a close guess of the value, measurement or calculation of something. I can solve measurement problems by measuring in two different ways. I can identify the hour and minute hand to determine the time on an analog clock and know that a digital clock represents the time using digits. I can collect, interpret, and record data on a graph. I can solve word problems involving money by knowing the values of coins.
Unit Essential Questions	**Unit Enduring Understandings**
What unit of measurement should I use to estimate measurement? - 2.MD.3 What is the relationship between two units of measurement when measuring the same object? - 2.MD.2 What do I need to know to solve word problems involving lengths in the same unit? - 2.MD.5	I can make an estimate in measurement with inches, feet, meters and centimeters. I can measure the same object using inches and feet, and know that there are more inches than feet. I can use addition and subtraction strategies to solve word problems involving lengths.

What do I need to know to solve word problems about money? What does addition and subtraction have to do with measurement? - 2.MD.4 How can I record measurement? How can I record data? How can I tell time? How can I determine AM and PM? How can I use a number line to find sums and differences within 100? - 2.MD.6	I need to understand and know the value of dollars, quarters, dimes, nickels and pennies in order to solve money problems I can find the difference in the size of objects by using addition or subtraction. Measurement can be recorded in inches, feet, meters, and centimeters. I can use a line plot, picture graph, or bar graph to record data collected. I can tell time to the nearest 5 minute using analog and digital clocks. I can determine AM and PM by understanding AM begins at 12 midnight and ends at 12 noon. PM begins at 12 noon and ends at midnight. I can use a portion of a number line to find sum and differences within 100.
Unit Rationale Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools Students are able to use the appropriate time-telling tool which lays the foundation for future mathematical applications. Knowing the value of coins will lay the foundation for being able to count money and make change in the future.	**Unit Overview** Students will learn to measure by using estimation and by using specific methods for precise measurement. They will learn to tell more precise time, by 5s; and to use money to add and subtract. They will also use graphs and drawing to record and analyze data.

Activities -

Time
- Find activities in MyMath - Chapter 10
- IXL - Time section
- Online time telling games - Stop the Clock, Sheppard's Software, Arcadenucs,org
- Math Journal - CGI word problems (located in binder in main HAS hallway)
- Match Analog/Digital Clock printable card game - can be downloaded online
- What Time is it Mr. Crocodile by Judy Sierra
- Ipad and Google Apps - Mr. Wolf, Telling Time, TT Clock

Measurement
- Find activities in MyMath - Chapter 11
- IXL - Units of Measurement section
- Make sure to have the following measurement tools available - meter stick, yardstick, tape measure, ruler
- How Big is a Foot by Rolf Myler
- Math Journal - CGI word problems (located in binder in main HAS hallway)
- Create bags containing various items to provide children hands-on measurement practice (examples include a playing card, paint brush, popsicle stick, etc)
- Supplement the homework with more realistic items to measure
- Use different resources to reinforce contents of lessons 2, 3, 4, 5, 7, 8, 9, 10 - Use items around the classroom to perform measurements with various tools

Data
- Find activities in MyMath - Chapter 9
- IXL - Data and Graph section
- Mathisfun.com interactive graphing website

Money
- Find activities in MyMath - Chapter 8
- IXL - Money
- Math Journal - CGI word problems (located in binder in main HAS hallway)
- Coin manipulatives
- Sheppard's Software
- Arcademics.org
- I Have, Who Has Coin game (Can be downloaded), Coin Top-It (Can be downloaded)

- Penny, Nickel, Dime Exchange - Everydaymath game
- Ipad and Google Apps - Amazing Coin, My Piggy Bank

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Engaging Students ~ Fostering Achievement ~ Cultivating 21st Century Global Skills
Written By: Kim Felix, Patricia Martel, Beth Canzanese
Revised By: Roberta Ignaczewski
Approved June 2017
Course Title: Second Grade Math   Unit Name: Geometry
Grade Level: 2

Content Statements	NJSLS:
Reasoning with, defining, composing shapes and angles and their attributes. Partition rectangles and circles.	2.G, 1-3
Overarching Essential Questions	**Overarching Enduring Understandings**
Why do I need to know how to distinguish attributes of shapes?	Attributes of shapes, including angles and equal faces, help me to understand objects and compose new shapes.
What is a composite shape?	Composites are formed by combining shapes.
How can I partition different shapes?	I can partition different shapes into equal parts
Unit Essential Questions	**Unit Enduring Understandings**
What are the attributes of different shapes?	Attributes of shapes include sides, angles, faces , edges and vertices.
What are some shapes I should be able to identify?	I can identify triangles, quadrilaterals, pentagons, hexagons and cubes..
How can I partition a circle or a rectangle?	Circles and rectangles can be partitioned in halves, thirds, and fourths, which create equal shares of the whole.
	Equal shares of a circle or rectangle do not necessarily have the same size and shape.

Unit Rationale	Unit Overview
Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.	Students will identify and compose composite shapes. They will be able to identify the attributes of those shapes and partition circles and rectangles.

Activites:

Fractions
- Find activities in MyMath - Chapter 12
- Fraction Bump the Number game - Can be downloaded from TPT
- Fraction Pizza Manipulative
- Fraction Games - Can be bought on TPT or downloaded
- IXL - Fraction section

Shapes
- Find activities in MyMath - Chapter 12
- STEM activities - build shapes using straws and twist ties
- 3D manipulatives and pattern blocks
- The Greedy Triangle by Marilyn Burns and Gordon Silveria
- IXL - 2D shapes and 3D shapes

Calendar

Time frame(this is just a guide)	Math Concepts	Standards	Notes
First week of school	# sense activities		
Middle of September- Beginning of October	Chapter 1- Apply Addition and Subtraction Concepts (19 days)	2.OA.1, 2.OA.2, 2.NBT.5, 2.NBT.9	incorporate number sense activities in daily lessons
End of October- Beginning of November	Chapter 2- Number Patterns (12 days)	2.OA.1, 2.OA.2,2.OA.3, 2.OA.4 , 2.NBT.2	continue to review add/sub strategies including numberline and number grid
End of November	Chapter 8- Money (9 days)	2.MD.8	use number grid to count up to make change
December	Chapter 10- Time (11 days)	2.MD.7	continue to review add/sub, arrays, odd/ even and money
January	Chapter 5- Place Value (12 days)	2.NBT.1a,b, 2.NBT.2, 2.NBT.3, 2.NBT.4, 2.NBT.8	continue to review add/sub, arrays, odd/even, money and time

End of January	Chapter 3- Add Two-Digit Numbers (12 days)	2.OA.1, 2.NBT.5, 2.NBT.6, 2.NBT.9	continue to review add/sub, arrays, odd/even, money, time and place value
February	Chapter 4- Subtract Two- Digit Numbers (14 days)	2.OA.1, 2.NBT.5, 2.NBT.9	continue to review add/sub, arrays, odd/even, money, time and place value
March	Chapter 6- Add Three-Digit Numbers (13 days)	2.NBT.7, 2.NBT.8, 2.NBT.9	review money by adding amounts
End of March- Beginning of April	Chapter 7- Subtract Two- Digit Numbers (14 days)	2.NBT.7, 2.NBT.8, 2.NBT.9	Review money by subtracting to make change. Review elapsed time using subtration or addition
End of April- Beginning of May	Chapter 9- Data Analysis (13 days)	2.MD.9, 2.MD.10	continue to review add/sub, arrays, odd/even, money, time and place value
May	Chapter 12- Geometric Shapes and Equal Shares (13 days)	2.G.1, 2.G.2, 2G.3	continue to review add/sub, arrays, odd/even, money, time and place value

| June | Chapter 11- Customary and Metric Lengths (18 days) | 2.MD.1, 2.MD.2, 2.MD.3, 2.MD.4, 2MD.5 |

Time frame(this is just a guide)	Math Concepts	Standards
First week of school	# sense activities	
End of September- Beginning of October	Chapter 1- Apply Addition and Subtraction Concepts (19 days)	2.OA.1, 2.OA.2, 2.NBT.5, 2.NBT.9

End of October- Beginning of November	Chapter 2- Number Patterns (12 days)	2.OA.1, 2.OA.2,2.OA.3, 2.OA.4 , 2.NBT.2
End of November	Chapter 8- Money (9 days)	2.MD.8
December	Chapter 10- Time (11 days)	2.MD.7
January	Chapter 5- Place Value (12 days)	2.NBT.1a,b, 2.NBT.2, 2.NBT.3, 2.NBT.4, 2.NBT.8
End of January	Chapter 3- Add Two-Digit Numbers (12 days)	2.OA.1, 2.NBT.5, 2.NBT.6, 2.NBT.9
February	Chapter 4- Subtract Two- Digit Numbers (14 days)	2.OA.1, 2.NBT.5, 2.NBT.9
March	Chapter 6- Add Three- Digit Numbers (13 days)	2.NBT.7, 2.NBT.8, 2.NBT.9
End of March- Beginning of April	Chapter 7- Subtract Two- Digit Numbers (14 days)	2.NBT.7, 2.NBT.8, 2.NBT.9
End of April- Beginning of May	Chapter 9- Data Analysis (13 days)	2.MD.9, 2.MD.10
May	Chapter 12- Geometric Shapes and Equal Shares (13 days)	2.MD.1, 2.MD.2, 2.MD.3, 2.MD.4, 2MD.5
Beginning of June	Chapter 11- Customary and Metric Lengths (18 days)	2.G.1, 2.G.2, 2G.3

Appendix

Differentiation	
Enrichment	- Utilize collaborative media tools - Provide differentiated feedback - Opportunities for reflection - Encourage student voice and input - Model close reading - Distinguish long term and short term goals
Intervention	- Utilize "skeleton notes" where some required information is already filled in for the student - Provide access to a variety of tools for responses - Provide opportunities to build familiarity and to practice with multiple media tools - Leveled text and activities that adapt as students build skills - Provide multiple means of action and expression - Consider learning styles and interests - Provide differentiated mentors - Graphic organizers

ELLs	- Pre-teach new vocabulary and meaning of symbols - Embed glossaries or definitions - Provide translations - Connect new vocabulary to background knowledge - Provide flash cards - Incorporate as many learning senses as possible - Portray structure, relationships, and associations through concept webs - Graphic organizers

21st Century Skills

- Creativity
- Innovation
- Critical Thinking
- Problem Solving
- Communication
- Collaboration

Integrating Technology

- Chromebooks
- Internet research
- Online programs
- Virtual collaboration and projects
- Presentations using presentation hardware and software