Grade: 2	**Course: Math**
Pacing: 8 weeks	
Unit: 1:Place Value and Basic Facts	**Big Idea:** **Chapter 1:Understand Place Value** **Chapter 2:Use Place Value** **Chapter 3: Basic Facts**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 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. ● 2.OA.B.2 With accuracy and efficiency, add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. ● 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: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” 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). ● 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s. ● 2.NBT.A.3 Read and 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.	**English Language Arts** ● SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue ● SL.AS.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification **Science** ● K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool.

● 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. **Standards for Mathematical Practice** ● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason abstractly and quantitatively. ● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.1.2.AP.4: Break down a task into a sequence of steps. ● 8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.	**21st Century Skills** ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive) ● 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **Technology** ● 9.4.2.TL.6: Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Use technology to enhance productivity, increase collaboration and communicate effectively. ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them.
Student Learning Objectives (SLO)	

Students will be 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.
- add within 10 using mental strategies with accuracy and efficiency.
- subtract within 10 using mental strategies with accuracy and efficiency.
- represent 100 as a bundle of ten *tens.*
- represent the number of *hundreds*, *tens*, and *ones* in a 3-digit number.
- count by fives within 1000.
- count by tens within 1000.
- count by hundreds within 1000.
- 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.
- 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 <.
- 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.

Academic Vocabulary

Count on, Add, Sum, Subtract, Difference, Equation, Place value, Number names

Essential Questions	***Enduring Understandings***
● How does finding a pattern help you find all the ways to show a number with tens and ones? ● How do you count by 1s, 5s, and 10s with numbers less than 100? ● How do you count by 1s, 5s, 10s, and 100s with numbers less than 1,000? ● How do you describe a 2-digit number as tens and ones? What are different ways to write a 2-digit number?	● Numbers can be represented in different ways using place value (standard form, word form, expanded form, base-ten blocks). ● Each digit in a number has a value depending on its place (ones, tens, hundreds).

● How can you show the value of a number in different ways? ● How does finding a pattern help you find all the ways to show a number with tens and ones? ● How do you count by 1s, 5s, and 10s with numbers less than 100? ● How do you count by 1s, 5s, 10s, and 100s with numbers less than 1,000? ● How do you group tens as hundreds? ● How do you write a 3-digit number for a group of tens? ● How do you show a 3-digit number using blocks? ● How do you write the 3-digit number that is shown by a set of blocks? ● How do you know the values of the digits in numbers? ● How do you write 3-digit numbers using words? ● What are three ways to write a 3-digit number? ● How can you use blocks or quick pictures to show the value of a number in different ways? ● How do you use place value to find 10 more, 10 less, 100 more, or 100 less than a 3-digit number? ● How does place value help you identify and extend counting patterns? ● How can you make a model to solve a problem about comparing numbers? How do you compare 3-digit numbers? ● How can you use doubles facts to find sums for near doubles facts? ● What are some ways to remember sums? ● How is the make a ten strategy used to find sums? ● How do you add three numbers? ● How are addition and subtraction related? ● What are some ways to remember differences? ● How does getting to 10 in subtraction help when finding differences? ● How are bar models used to show addition and subtraction problems? ● How are number sentences used to show addition and subtraction situations?	● A two-digit number is made up of tens and ones; a three-digit number is made up of hundreds, tens, and ones. ● Numbers can be shown and understood using concrete models (like blocks), drawings (like quick pictures), and symbolic notation. ● Patterns in numbers help us count efficiently and recognize relationships among numbers. ● Skip counting by 1s, 5s, 10s, and 100s reveals patterns that help with addition, subtraction, and understanding place value. ● Recognizing patterns helps us predict and extend number sequences and supports mental math strategies. ● Numbers can be expressed in multiple ways (e.g., 47 is 4 tens and 7 ones or 3 tens and 17 ones). ● Understanding how to regroup numbers helps us make sense of different number models and solve problems in more than one way. ● We can model the same quantity using different combinations of tens and ones or hundreds, tens, and ones. ● Place value helps us compare numbers and determine which is greater or less. ● Understanding place value allows us to efficiently find 10 more/less or 100 more/less than a given number. ● Using models and number lines helps visualize how numbers change and compare. ● Recognizing and using doubles facts helps students efficiently solve near doubles problems by adjusting the known double by 1 more or less. ● Understanding patterns, using visual models, and practicing with strategies like doubles, making ten, and counting on can help students remember sums. ● The make-a-ten strategy helps students break apart numbers and regroup them to form a ten, which makes addition faster and easier.

● How can acting it out help when solving a problem about equal groups? ● How can you write an addition sentence for problems with equal groups? ● How does breaking apart a number make it easier to add? ● How can you make an addend a ten to help solve an addition problem? ● How do you break apart addends to add tens and then add ones? ● When do you regroup in addition? ● How do you record 2-digit addition? ● How do you record the steps when adding 2-digit numbers? ● How do you record the steps when adding 2-digit numbers? ● What are two different ways to write addition problems? ● How can drawing a diagram help when solving addition problems? ● How do you write a number sentence to represent a problem? ● What are some ways to add 3 numbers? ● What are some ways to add 4 numbers? ● How does breaking apart a number make subtracting easier? ● When do you regroup in subtraction? ● How do you record 2-digit subtraction? ● How do you record the steps when subtracting 2-digit numbers? ● What are two different ways to write subtraction problems? ● How can you use addition to solve subtraction problems? ● How can drawing a diagram help when solving subtraction problems? ● How do you write a number sentence to solve subtraction problems? ● How can drawing a diagram help when solving subtraction problems? ● How do you write a number sentence to represent a problem? ● How do you decide what steps to do to solve a problem? ● How do you break apart addends to add hundreds, tens, and then ones? ● When do you regroup ones in addition? When do you regroup tens in addition?	● When adding three numbers, students can look for pairs that make ten or use grouping strategies to simplify the process and ensure accuracy. ● Addition and subtraction are inverse operations, and understanding their relationship helps students solve problems and check their work. ● Using subtraction strategies like counting back, using number lines, and fact families can help students remember and understand differences. ● Using 10 as a benchmark in subtraction helps students break apart numbers and solve problems more easily through mental math strategies. ● Bar models visually represent the parts and whole in addition and subtraction, helping students make sense of word problems and number relationships. ● Number sentences are symbolic representations of math problems that help students connect operations to real-world situations and mathematical thinking. ● Acting out problems helps students concretely understand multiplication concepts by organizing objects into equal groups and visualizing repeated addition. ●

Core Instruction/Supplemental Materials	***Assessments***

● HMH Waggle Adaptive Learning Program ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● Tabletop Flipchart ● “Math on the Spot” videos through HMH Go Math ● iTools from HMH Go Math ● HMH Go Math Supplemental Slides ● Math Readers from Go Math ● Boddle Math ● Reflex Math ● SumDog ● Prodigy ● Kahoot ● Quizizz ● Khan Academy ● iReady Learning Path and Lessons materials ● EnVision Math ● Teacher Created Materials ● 2.OA.A.1 Pencil and a Sticker ● 2.OA.B.2 Building toward fluency ● 2.NBT.A.1 Making 124 ● 2.NBT.A.1 Largest Number Game ● 2.NBT.A.3 Looking at Numbers Every Which Way ● 2.NBT.A.4 Ordering 3-digit numbers ● 2.NBT.B.8 Choral Counting	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments
Modifications/Differentiated Activities	
Enrichment/Gifted and Talented ● Differentiated curriculum for the gifted learner.	**Multilingual Learners** ● Alternate Responses

● Regular classroom curricula and instruction that is adapted, modified, or replaced. ● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials. ● Integrated G&T programming into the general education school day. ● Flexible groupings of students to facilitate differentiated instruction and curriculum. Learning Environments: ● Extensive outside reading ● Active classroom discussion ● Innovative oral and written presentations ● Deductive and inductive reasoning ● Independent writing and research ● Divergent thinking ● Challenging problem solving situations ● Interactive, independent and interdisciplinary activities	● Notes in Advance ● Extended Time ● Simplified Instruction (written and verbal) ● Online Dictionary ● Use lots of visuals ● Use physical activity; model, role-play ● Repeat/Rephrase often ● Use lower level materials when appropriate
Special Education GENERAL MODIFICATIONS: ● Allow outlining, instead of writing for an essay or major project ● Computerized spell-check support ● Word bank of choices for answers to test questions ● Provision of calculator and/or number line for math tests ● Film or video supplements in place of reading text ● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior	**At Risk (Intervention)** ● Maximize use of community resources ● Connect family to school and school activities ● Support through transition ● Help develop compensating strategies ● Increase opportunity for positive peer group influences ● Supplemental courses ● Placement in small and interactive groups

● Daily feedback to student ● Use de-escalation strategies ● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	

Grade: 2	**Course: Math**
Pacing: 14 weeks	
Unit: 2: Equal Groups, 2 and 3 Digit Addition and Subtraction	**Big Idea:** **Chapter 4: Equal Groups** **Chapter 5:2 Digit Addition** **Chapter 6: More 2 Digit Addition** **Chapter 7:2 Digit Subtraction** **Chapter 8:More 2 Digit Subtraction** **Chapter 9: 2 Digit Addition and Subtraction** **Chapter 10: 3 Digit Addition and Subtraction**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***

● 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. ● 2.OA.B.2 With accuracy and efficiency, add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. ● 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. ● 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 ● 2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. ● 2.NBT.B.5 With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of	**English Language Arts** ● SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue ● SL.AS.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification **Science** ● K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool.

operations, and/or the relationship between addition and subtraction. ● 2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations. ● 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. ● 2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Clarification: Explanations should be supported by drawings or objects.) ● 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s. **Standards for Mathematical Practice** ● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason abstractly and quantitatively. ● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.1.2.AP.4: Break down a task into a sequence of steps. ● 8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.	**21st Century Skills** ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

	● 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **Technology** ● 9.4.2.TL.6: Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Use technology to enhance productivity, increase collaboration and communicate effectively. ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them.

Student Learning Objectives (SLO)

Students will be 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.
- add within 10 using mental strategies with accuracy and efficiency.
- subtract within 10 using mental strategies with accuracy and efficiency.
- 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.
- 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.
- partition a rectangle into rows and columns of same-size squares and count to find the total number.
- with accuracy and efficiency, add and subtract within 50 using strategies based on place value.
- with accuracy and efficiency, add and subtract within 50 using strategies based on properties of operations. ● with accuracy and efficiency, add and subtract within 50 using strategies based on the relationship between addition and subtraction. ● 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.
- 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. ● 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. ● count within 1000 by ones. ● count within 1000 by fives, tens, and hundreds beginning at any multiple of 5, 10, or 100.
Academic Vocabulary
Count on, Addition, Sum, Subtraction, Difference, Equation, Even, Odd, Array, Repeated addition, Place value

Essential Questions	***Enduring Understandings***
● How can you use doubles facts to find sums for near doubles facts? ● What are some ways to remember sums? ● How is the make a ten strategy used to find sums? ● How do you add three numbers? ● How are addition and subtraction related? ● What are some ways to remember differences? ● How does getting to 10 in subtraction help when finding differences? ● How are bar models used to show addition and subtraction problems? ● How are number sentences used to show addition and subtraction situations? ● How can acting it out help when solving a p ● How does breaking apart a number make it easier to add? ● How can you make an addend a ten to help solve an addition problem? ● How do you break apart addends to add tens and then add ones? ● When do you regroup in addition? ● How do you record 2-digit addition? ● How do you record the steps when adding 2-digit numbers? ● How do you record the steps when adding 2-digit numbers?	● Understanding doubles helps students efficiently solve near doubles by adjusting the sum by one more or less. ● Making a ten simplifies addition by creating a friendly number that is easier to work with ● Numbers can be decomposed into place value parts (hundreds, tens, ones) or friendly combinations to make computation easier in both addition and subtraction. ● Adding in any order (associative property) and grouping numbers that make ten or other easy sums improves fluency. ● Visual representations help illustrate relationships in math problems and support problem-solving and reasoning. ● Using physical models or acting out a problem deepens understanding by making abstract concepts concrete. ● Addition and subtraction are inverse operations, and one can be used to check or solve the other. ● Breaking apart numbers to make ten can simplify subtraction just like in addition. ● Number sentences represent math problems symbolically and help communicate mathematical thinking clearly ● Organizing steps and aligning place values correctly ensures accuracy when solving multi-digit problems.

● What are two different ways to write addition problems? ● How can drawing a diagram help when solving addition problems? ● How do you write a number sentence to represent a problem? ● What are some ways to add 3 numbers? ● What are some ways to add 4 numbers? ● How does breaking apart a number make subtracting easier? ● When do you regroup in subtraction? ● How do you record 2-digit subtraction? ● How do you record the steps when subtracting 2-digit numbers? ● What are two different ways to write subtraction problems? ● How can you use addition to solve subtraction problems? ● How can drawing a diagram help when solving subtraction problems? ● How do you write a number sentence to represent a problem? ● How do you decide what steps to do to solve a problem? ● How do you break apart addends to add hundreds, tens, and then ones? ● When do you regroup ones in addition? ● When do you regroup tens in addition? ● How do you know when to regroup in addition? ● How can making a model help when solving subtraction problems? ● When do you regroup tens in subtraction? ● When do you regroup hundreds in subtraction? ● How do you know when to regroup in subtraction? ● How do you regroup when there are zeros in the number you start with?	● Regrouping is necessary when the value in one place is not sufficient to complete the operation (e.g., more than 9 in addition or not enough in subtraction). ● Understanding place value is key to knowing when and how to regroup ones, tens, and hundreds. ● When numbers contain zeros, regrouping may involve multiple steps or levels, and understanding how to borrow across zeros is crucial. ● Good problem solvers evaluate different strategies and choose the most efficient one for the given problem. ● Breaking a problem into parts, visualizing it, or writing a number sentence helps clarify what the problem is asking and how to solve it.
Core Instruction/Supplemental Materials	***Assessments***
● HMH Waggle Adaptive Learning Program ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● Tabletop Flipchart ● “Math on the Spot” videos through HMH Go Math	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks

● iTools from HMH Go Math ● HMH Go Math Supplemental Slides ● Math Readers from Go Math ● Boddle Math ● Reflex Math ● SumDog ● Prodigy ● Kahoot ● Quizizz ● Khan Academy ● iReady Learning Path and Lessons materials ● EnVision Math ● Teacher Created Materials ● 2.OA.B.2 Hitting the Target Number ● 2.OA.C.3 Red and Blue Tiles ● 2.OA.C.4 Counting Dots in Arrays ● 2.G.A.2 Partitioning a Rectangle into Unit Squares ● 2.NBT.B.6 Toll Bridge Puzzle ● 2.NBT.B.7 How Many Days Until Summer Vacation? ● 2.NBT.B.9 Peyton and Presley Discuss Addition	**Alternative** ● Centers/activities/games ● Performance assessments
Modifications/Differentiated Activities	
Enrichment/Gifted and Talented ● Differentiated curriculum for the gifted learner. ● Regular classroom curricula and instruction that is adapted, modified, or replaced. ● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials. ● Integrated G&T programming into the general education school day. ● Flexible groupings of students to facilitate differentiated instruction and curriculum.	**Multilingual Learners** ● Alternate Responses ● Notes in Advance ● Extended Time ● Simplified Instruction (written and verbal) ● Online Dictionary ● Use lots of visuals ● Use physical activity; model, role-play ● Repeat/Rephrase often ● Use lower level materials when appropriate

Learning Environments: ● Extensive outside reading ● Active classroom discussion ● Innovative oral and written presentations ● Deductive and inductive reasoning ● Independent writing and research ● Divergent thinking ● Challenging problem solving situations ● Interactive, independent and interdisciplinary activities	
Special Education GENERAL MODIFICATIONS: ● Allow outlining, instead of writing for an essay or major project ● Computerized spell-check support ● Word bank of choices for answers to test questions ● Provision of calculator and/or number line for math tests ● Film or video supplements in place of reading text ● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies ● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	**At Risk (Intervention)** ● Maximize use of community resources ● Connect family to school and school activities ● Support through transition ● Help develop compensating strategies ● Increase opportunity for positive peer group influences ● Supplemental courses ● Placement in small and interactive groups

Grade: 2	**Course: Math**
Pacing: 6 weeks	
Unit: 3: Money, Time and Length in Customary and Metric Units	**Big Idea:** **Chapter 11: Money** **Chapter 12: Time** **Chapter 13: Lengths in Customary Units** **Chapter 14: Lengths in Metric Units**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● 2.M.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?* ● 2.DL.A.1 Understand that people collect data to answer questions. Understand that data can vary. ● 2.DL.A.2 Identify what could count as data (e.g., visuals, sounds, numbers ● 2.M.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. ●)2.M.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. ● 2.M.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. ● 2.M.A.3 Estimate lengths using units of inches, feet, centimeters, and meters. ● 2.M.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. ● 2.M.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by	**English Language Arts** ● SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue ● SL.AS.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification **Science** ● K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool.

using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem ● 2.M.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. ● 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s. ● 2.NBT.B.5 With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. **Standards for Mathematical Practice** ● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason abstractly and quantitatively. ● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	
Computer Science and Design Thinking	***Career Readiness, Life Literacies, and Key Skills***
● 8.1.2.AP.4: Break down a task into a sequence of steps. ● 8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.	**21st Century Skills** ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive) ● 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **Technology** ● 9.4.2.TL.6: Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

	Career Readiness, Life Literacies, and Key Skills Practices: ● Use technology to enhance productivity, increase collaboration and communicate effectively. ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them.

Student Learning Objectives (SLO)

Students will be 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.
- 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.
- measure lengths of objects using rules, yardsticks, meter sticks and measuring tapes.
- measure the length of an object using different units of measure.
- compare the measurements and explain how they relate to each unit.
- estimate lengths of objects.
- 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.
- 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.
- 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.
- count within 1000 by ones.
- count within 1000 by fives, tens, and hundreds beginning at any multiple of 5, 10, or 100.
- 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.

Academic Vocabulary

Measure, Length, Units of measure, Estimate, Addition, Sum, Subtraction, Difference, Hours, Minutes, Seconds, Place value, Dollar, Quarter, Dime, Nickel, Penny, Cent	
Essential Questions	***Enduring Understandings***
● How do you find the total value of a group of dimes, nickels, and pennies? ● How do you find the total value of a group of coins? ● How do you order coins to help find the total value of a group of coins? ● How do you choose coins to show a money amount in different ways? ● How can you show the value of one dollar with coins? ● How do you show money amounts greater than one dollar? ● How does acting it out help when solving problems about money? ● How do you tell time to the hour and half hour on a clock? ● How do you tell and show time to five minutes? ● How does acting it out help when solving problems about money? ● How do you tell time to the hour and half hour on a clock? ● How do you tell and show time to five minutes? ● How does acting it out help when solving problems about money? ● How do you tell time to the hour and half hour on a clock? ● How do you tell and show time to five minutes? ● How can you use inch models to measure length? ● Why is using a ruler similar to using a row of color tiles to measure length? ● How do you estimate the lengths of objects in inches? ● How do you use an inch ruler to measure lengths? ● How can drawing a diagram help when solving problems about length? ● Why is measuring in feet different from measuring in inches? ● How do you estimate the lengths of objects in feet? ● How do you choose a measuring tool to use when measuring lengths? ● How can a line plot be used to show measurement data?	● Coins and bills have specific values and can be combined in different ways to show the same total amount. ● Ordering coins from greatest to least helps when counting and finding total values efficiently. ● Understanding coin values and combinations helps students solve problems involving money, including making change or showing amounts in different ways. ● One dollar is equivalent to 100 cents and can be made up of different combinations of coins. ● Money amounts greater than a dollar can be represented with a combination of dollars and coins. ● Acting out money problems helps students model real-life situations and clarify how money is used in context. ● A clock is divided into hours and minutes, and knowing how to read both hour and minute hands is essential for telling time. ● Time can be shown and told to the hour, half hour, and in 5-minute intervals using both analog and digital clocks. ● Understanding the passage of time helps students connect to daily routines and real-world problem solving. ● Acting out or using models of clocks supports deeper understanding of elapsed time and time-telling skills. ● Measurement involves comparing objects and using standard tools such as rulers, yardsticks, and meter sticks to find length. ● Tools like inch rulers or centimeter rulers give consistent units to measure accurately. ● Estimating length helps students develop number sense and supports checking for reasonableness in measurements. ● Different units (inches, feet, centimeters, meters) are appropriate for measuring different-sized objects.

● How do you use a centimeter model to measure the lengths of objects? ● How do you use known lengths to estimate unknown lengths? ● How do you use a centimeter ruler to measure lengths? ● How can drawing a diagram help when solving problems about lengths? ● How is measuring in meters different from measuring in centimeters? ● How do you estimate the lengths of objects in meters? ● How do you find the difference between the lengths of two objects?	● Drawing diagrams helps visualize and solve real-world measurement problems, such as comparing or adding lengths. ● Choosing the right tool for measuring depends on the object's size and the level of precision needed.
Core Instruction/Supplemental Materials	***Assessments***
● HMH Waggle Adaptive Learning Program ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● Tabletop Flipchart ● "Math on the Spot" videos through HMH Go Math ● iTools from HMH Go Math ● HMH Go Math Supplemental Slides ● Math Readers from Go Math ● Boddle Math ● Reflex Math ● SumDog ● Prodigy ● Kahoot ● Quizizz ● Khan Academy ● iReady Learning Path and Lessons materials ● EnVision Math ● Teacher Created Materials EnVision Math ● Teacher Created Materials ● 2.M.A.1,3,4 Determining Length	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments

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- 2.M.B.5 High Jump Competition
- 2.M.B.6 Frog and Toad on the Number Line
- 2.M.C.7 Ordering Time
- 2.NBT.B.5 Saving Money 1
- 2.NBT.B.5 Saving Money 2
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<tr><td colspan="2">Modifications/Differentiated Activities</td></tr>
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Enrichment/Gifted and Talented

- Differentiated curriculum for the gifted learner.
- Regular classroom curricula and instruction that is adapted, modified, or replaced.
- Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials.
- Integrated G&T programming into the general education school day.
- Flexible groupings of students to facilitate differentiated instruction and curriculum.

Learning Environments:

- Extensive outside reading
- Active classroom discussion
- Innovative oral and written presentations
- Deductive and inductive reasoning
- Independent writing and research
- Divergent thinking
- Challenging problem solving situations
- Interactive, independent and interdisciplinary activities

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Multilingual Learners

- Alternate Responses
- Notes in Advance
- Extended Time
- Simplified Instruction (written and verbal)
- Online Dictionary
- Use lots of visuals
- Use physical activity; model, role-play
- Repeat/Rephrase often
- Use lower level materials when appropriate

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Special Education

GENERAL MODIFICATIONS:

- Allow outlining, instead of writing for an essay or major project ● Computerized spell-check support
- Word bank of choices for answers to test questions

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At Risk (Intervention)

- Maximize use of community resources
- Connect family to school and school activities
- Support through transition
- Help develop compensating strategies

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● Provision of calculator and/or number line for math tests ● Film or video supplements in place of reading text ● Reworded questions in simpler language ● Projects instead of written reports ● Highlighting important words or phrases in reading assignments ● Modified workload or length of assignments/tests ● Modified time demands ● Pass/no pass option ● Modified grades based on IEP BEHAVIOR MODIFICATIONS: ● Breaks between tasks ● Cue expected behavior ● Daily feedback to student ● Use de-escalation strategies ● Use positive reinforcement ● Use proximity/touch control ● Use peer supports and mentoring ● Model expected behavior by adults ● Have parent sign homework/behavior chart ● Set and post class rules ● Chart progress and maintain data	● Increase opportunity for positive peer group influences ● Supplemental courses ● Placement in small and interactive groups

Grade: 2	**Course: Math**
Pacing: 4 weeks	
Unit: 4: Geometry, Fraction Concepts and Data	**Big Idea:** **Chapter 15: Geometry** **Chapter 16: Fraction Concepts** **Chapter 17: Data**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***

● 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. (Clarification: Sizes are compared directly or visually, not compared by measuring) ● 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 shares of identical wholes need not have the same shape. ● 2.DL.B.3 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. ● 2.DL.B.4 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 a bar graph. ● 2.OA.B.2 With accuracy and efficiency, add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. ● 2.NBT.B.5 With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of	**English Language Arts** ● SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue ● SL.AS.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification **Science** ● K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool.

operations, and/or the relationship between addition and subtraction. **Standards for Mathematical Practice** ● 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.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	

Computer Science and Design Thinking	*Career Readiness, Life Literacies, and Key Skills*
● 8.1.2.AP.4: Break down a task into a sequence of steps. ● 8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.	**21st Century Skills** ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive) ● 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **Technology** ● 9.4.2.TL.6: Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Use technology to enhance productivity, increase collaboration and communicate effectively. ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them.
Student Learning Objectives (SLO)	
Students will be able to… ● draw shapes having specified attributes (e.g. number of equal faces, number of angles)	

- identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- 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. ● 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.
- 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.
- 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.
- add within 20 using mental strategies with accuracy and efficiency.
- subtract within 20 using mental strategies with accuracy and efficiency.
- with accuracy and efficiency, add and subtract within 100 using place value strategies, properties of operations and/or the relationship between addition and subtraction.

Academic Vocabulary

Angle, Triangle, Quadrilateral, Pentagon, Hexagon, Cube, Rectangle, Halves, Thirds, Fourths,, Line plot, Bar graph, Addition, Sum, Subtraction, Difference, Place value

Essential Questions	***Enduring Understandings***
● What objects match three-dimensional shapes? ● How would you describe the faces of a rectangular prism and the faces of a cube? ● How can you build a rectangular prism? ● What shapes can you name just by knowing the number of sides and vertices? ● How do you find and count angles in two dimensional shapes? ● How do you use the number of sides and angles to sort two-dimensional shapes? ● How do you find the total number of same size squares that will cover a rectangle?	● Three-dimensional shapes can be found in everyday objects; recognizing these helps students connect geometry to the real world. ● A rectangular prism has rectangular faces, while a cube has square faces that are all the same size. Both shapes have flat surfaces called faces. ● A rectangular prism can be built by connecting rectangles to form six flat faces, with opposite faces being equal in size.

● What are halves, thirds, and fourths of a whole? ● How do you know if a shape shows halves, thirds, or fourths? ● How do you find a half of, a third of, or a fourth of a whole? ● How can drawing a diagram help when solving problems about equal shares? ● How do you use a tally chart to record data from a survey? ● How do you use a picture graph to show data? ● How do you make a picture graph to show data in a tally chart? ● How is a bar graph used to show data? ● How do you make a bar graph to show data? ● How does making a bar graph help when solving problems about data?	● Two-dimensional shapes can be identified by their attributes, such as the number of sides and vertices, which stay the same regardless of orientation. ● Data can be collected using tally marks, then organized in graphs to help interpret and answer questions. ● Angles are formed where two sides of a shape meet. By identifying corners, students can count the number of angles in a shape. ● Shapes can be grouped and compared based on shared attributes such as the number of sides and angles ● Picture graphs and bar graphs show data visually and make it easier to compare categories and solve problems. ● Making and reading graphs helps students summarize data and draw conclusions. ● Line plots show measurement data and help organize repeated data points. ● Representing data visually supports decision-making and problem-solving based on real-world information.
Core Instruction/Supplemental Materials	***Assessments***
● HMH Waggle Adaptive Learning Program ● Interactive Student Journal ● Student Journal from Go Math ● Reteach and Enrich resources from Go Math ● Vocabulary Cards ● Tabletop Flipchart ● “Math on the Spot” videos through HMH Go Math ● iTools from HMH Go Math ● HMH Go Math Supplemental Slides ● Math Readers from Go Math ● Boddle Math ● Reflex Math ● SumDog ● Prodigy ● Kahoot	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments

● Quizizz ● Khan Academy ● iReady Learning Path and Lessons materials ● EnVision Math ● Teacher Created Materials EnVision Math ● Teacher Created Materials ● 2.M.C.8 Delayed Gratification ● 2.DL.B.3 Hand Span Measures ● 2.DL.B.3 The Longest Walk ● 2.DL.B.4 Favorite Ice Cream Flavor	
Modifications/Differentiated Activities	
Enrichment/Gifted and Talented ● Differentiated curriculum for the gifted learner. ● Regular classroom curricula and instruction that is adapted, modified, or replaced. ● Educational opportunities consisting of a continuum of differentiated curricular options, instructional approaches and materials. ● Integrated G&T programming into the general education school day. ● Flexible groupings of students to facilitate differentiated instruction and curriculum. Learning Environments: ● Extensive outside reading ● Active classroom discussion ● Innovative oral and written presentations ● Deductive and inductive reasoning ● Independent writing and research ● Divergent thinking ● Challenging problem solving situations ● Interactive, independent and interdisciplinary activities	**Multilingual Learners** ● Alternate Responses ● Notes in Advance ● Extended Time ● Simplified Instruction (written and verbal) ● Online Dictionary ● Use lots of visuals ● Use physical activity; model, role-play ● Repeat/Rephrase often ● Use lower level materials when appropriate
Special Education	**At Risk (Intervention)**

GENERAL MODIFICATIONS:

- Allow outlining, instead of writing for an essay or major project
- Computerized spell-check support
- Word bank of choices for answers to test questions
- Provision of calculator and/or number line for math tests
- Film or video supplements in place of reading text
- Reworded questions in simpler language
- Projects instead of written reports
- Highlighting important words or phrases in reading assignments
- Modified workload or length of assignments/tests
- Modified time demands
- Pass/no pass option
- Modified grades based on IEP

BEHAVIOR MODIFICATIONS:

- Breaks between tasks
- Cue expected behavior
- Daily feedback to student
- Use de-escalation strategies
- Use positive reinforcement
- Use proximity/touch control
- Use peer supports and mentoring
- Model expected behavior by adults
- Have parent sign homework/behavior chart
- Set and post class rules
- Chart progress and maintain data

- Maximize use of community resources
- Connect family to school and school activities
- Support through transition
- Help develop compensating strategies
- Increase opportunity for positive peer group influences
- Supplemental courses
- Placement in small and interactive groups