Grade: Kindergarten	**Course: Math**
Pacing: 8 weeks	
Unit: 1: Building Numbers and Operations to Five	**Big Idea:** **Chapter 1: Count, Write and Represent 1 Through 4 Chapter 2: Count, Write and Represent 1 Through 5 Chapter 3: Compare Numbers Through 5** **Chapter 4: Put Together and Take Apart Numbers to 5 Chapter 5: Addition Up to 5** **Chapter 6: Subtraction Within 5**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● K.CC.A.1 Count to 100 by ones and by tens. ● K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). ● K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger. ● K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or	**English Language Arts** ● L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. ● RI.CI.K.2. With prompting and support, identify the main topic and key details of an informational text (e.g., who, what, where, when, why, how). ● SL.AS.K.6. Speak audibly and express thoughts, feelings, and ideas clearly. **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.

as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. ● K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ● K.DL.A.1 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10) ● K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above, below, beside, in front of, and next to.* **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.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.ITH.3: Identify how technology impacts or improves life.	**21st Century Skills** ● 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). ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive). **Technology** ● 9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2). **Career Readiness, Life Literacies, and Key Skills Practices:**

	● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Use technology to enhance productivity, increase collaboration and communicate effectively.

Student Learning Objectives (SLO)

Students will be able to…

- count orally by ones up to 10.
- write numbers from 0 to 10.
- say number names in the standard order.
- pair each object with one number name (one-to-one correspondence).
- count to tell the number of objects.
- count objects arranged in any order.
- identify the last number named as the number of objects counted.
- count to tell the number of objects arranged in a line, rectangular array, circle, or scattered configuration.
- count to tell the number of objects when asked *how many?* questions .
- given a number from 1-5, count out that many object.
- create addition events with objects
- create addition events with drawings and sounds
- create addition events by acting out situations and with verbal explanations.
- sort objects into categories.
- name shapes in order to describe objects in the environment.
- use terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to* in order to describe relative positions of objects.

Academic Vocabulary

Number names, Count, Addition, Sum, Above, Below, Beside, In front of, Behind, Next to, Category

Essential Questions	***Enduring Understandings***

● How can you show and count 1 and 2 with objects? ● How can you count and write 1 and 2 with words and numbers? ● How can you show and count 3 and 4 with objects? ● How can you count and write 3 and 4 with words and numbers? ● How can you show and count up to 5 objects? ● How can you count and write up to 5 with words and numbers? ● How can you use two sets of objects to show 5 in more than one way? ● How do you know that the order of numbers is the same as a set of objects that is one larger? ● How can you solve problems using the strategy make a model? ● How can you identify and write 0 with words and numbers? ● How can you use matching and counting to compare sets with the same number of objects? ● How can you compare sets when the number of objects in one set is greater than the number of objects in the other set? ● How can you compare sets when the number of objects in one set is less than the number of objects in the other set? ● How can you make a model to solve problems using a matching strategy? ● How can you solve problems using the strategy make a model? ● How can you use counting strategies to compare sets of objects? ● How can you compare two numbers between 1 and 10 ● How can you show addition as adding to? ● How can you show addition as putting together? ● How can you solve problems using the strategy act it out? ● ●How can you use objects and drawings to solve addition word problems? ● How can you use a drawing to find the number that makes a 10 from a given number? ● How can you solve addition word problems and complete the addition sentence? ● How can you solve addition word problems and complete the addition sentence? ● How can you model and write addition sentences for number pairs for sums to 5?	● Numbers represent quantities, and we can use objects to show and count those quantities. ● Numbers can be shown with objects, written in words, or represented with numerals. ● The number zero means no objects or nothing in a set. ● We can use counting and matching to figure out how many are in a group. ● The order of numbers tells us which numbers are more or less, and helps us understand that each next number is one more. ● We can compare groups of objects by counting or matching to see which group has more, fewer, or the same. ● Comparing numbers helps us understand the relationship between quantities. ● We can use strategies like matching, counting, or modeling to figure out which number or set is greater or less. ● Comparing numbers between 1 and 10 helps us build number sense and solve real-world problems. ● Addition means putting groups together or adding more to a group. ● We can use drawings, models, and objects to show addition. ● Number pairs can be used to show all the ways to make numbers up to 5 and eventually up to 10. ● We can find the number that makes 10 by using drawings or manipulatives to complete the set. ● Addition problems can be solved by acting them out, drawing, or using objects to model the situation. ● Writing an addition sentence helps us describe how two groups come together to make a total

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 ● K.CC.A.1 Counting Circles ● K.CC.A.1 Choral Counting ● K.CC.A.3 Number TIC TAC TOE ● K.CC.B.4 Counting Mat ● K.CC.B.5 Finding Equal Groups ● K.OA.A.1 Ten Frame Addition ● K.DL.A.1 Sort and Count 1	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments

<table>
<tr><th colspan="2">Modifications/Differentiated Activities</th></tr>
<tr><td>Enrichment/Gifted and Talented
● Differentiated curriculum for the gifted learner.
● egular 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</td><td>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</td></tr>
<tr><td>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</td><td>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</td></tr>
</table>

● 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	

Grade: Kindergarten	**Course: Math**
Pacing: 8 weeks	
Unit: 2 Building Numbers and Operations to Ten	**Big Idea:** **Chapter 7:Count and Represent Numbers Through 8** **Chapter 8: Count and Represent Numbers Through 10** **Chapter 9: Order and Compare numbers Through 10** **Chapter 10: Put Together and Take Apart Numbers Through 10 Chapter 11: Addition Up to 10** **Chapter 12: Subtraction Within 10**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***

● K.CC.A.1 Count to 100 by ones and by tens. ● K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1). ● K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ● K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. ● K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. ● K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Clarification: Include groups with up to ten objects.) ● K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.	**English Language Arts** ● L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. ● RI.CI.K.2. With prompting and support, identify the main topic and key details of an informational text (e.g., who, what, where, when, why, how). ● SL.AS.K.6. Speak audibly and express thoughts, feelings, and ideas clearly. **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.

● K.OA.A.5 Demonstrate accuracy and efficiency for addition and subtraction within 5. **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.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.ITH.3: Identify how technology impacts or improves life.	**21st Century Skills** ● 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). ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive). **Technology** ● 9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2). **Career Readiness, Life Literacies, and Key Skills** **Practices:** ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Use technology to enhance productivity, increase collaboration and communicate effectively.
Student Learning Objectives (SLO)	

Students will be able to…

- count orally by ones up to 50.
- count orally by tens up to 50.
- count orally by ones up to 50, beginning at any number.
- write numbers from 0 to 20.
- create subtraction and addition events with objects (up to 10).
- create subtraction and addition events with drawings and sounds (up to 10).
- create subtraction and addition events by acting out situations and with verbal explanations.
- use objects and drawings to represent addition and subtraction.
- add and subtract within 10.
- count to tell the number of objects arranged in a line, rectangular array, circle, or scattered configuration.
- count to tell the number of objects when asked “how many?” questions.
- given a number from 1-20, count out that many objects.
- compare the number of objects (up to 10) in two groups.
- identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. ● compare numbers (up to 10) written as numerals.
- add within 5 with accuracy and efficiency .

Academic Vocabulary

Count, Number names, Addition, Subtraction, Sum, Difference, Greater than, Less than, Equal to

Essential Questions	***Enduring Understandings***
● How do you know that the order of numbers is the same as a set of objects that is one larger? ● How can you solve problems using the strategy make a model? ● How can you use matching and counting to compare sets with the same number of objects? ● How can you compare sets when the number of objects in one set is greater than the number of objects in the other set? ● How can you compare sets when the number of objects in one set is less than the number of objects in the other set?	● Numbers represent quantities and help us count how many are in a group. ● Each time we count, the next number is one more than the last. ● We can count objects to show numbers up to 10 using words, numerals, and drawings. ● Numbers can be shown in different ways (objects, pictures, written words, or numerals). ● Counting forward from a given number helps us understand number order and builds fluency.

● How can you make a model to solve problems using a matching strategy? ● How can you use a counting strategy to compare sets of objects? ● How can you solve problems using the strategy make a model? ● How can you use counting strategies to compare sets of objects? ● How can you compare two numbers between 1 and 10 ● How can you show addition as adding to? ● How can you show addition as putting together? ● How can you solve problems using the strategy act it out? ● ●How can you use objects and drawings to solve addition word problems? ● How can you solve addition word problems and complete the addition sentence? ● How can you solve addition word problems and complete the addition sentence? ● How can you write addition sentences for number pairs for sums to 10? ● How can you show subtraction as taking from? ● How can you show subtraction as taking apart? ● How can you solve problems using the strategy act it out? ● How can you use objects and drawings to solve subtraction word problems? ● How can you solve subtraction word problems and complete the equation? ● How can you solve word problems using addition and subtraction? ● How can you use a counting strategy to compare sets of objects? ● How can you show and count 6 objects? ● How can you count and write up to 6 with words and numbers? ● How can you show and count 7 objects? ● How can you count and write up to 7 with words and numbers? ● How can you show and count 8 objects? ● How can you count and write up to 8 with words and numbers? ● How can you show and count 9 objects? ● How can you count and write up to 9 with words and numbers? ● How can you solve problems using the strategy draw a picture? ● How can you show and count 10 objects?	● Sets of objects can be compared by counting or matching to see if they have the same number, more, or fewer. ● We can use a matching strategy to compare sets and determine which has more or less. ● When we compare numbers between 1 and 10, we can use counting and modeling to show which number is greater or less. ● Understanding the order of numbers helps us see how they relate to the size of a group. ● Addition means putting two groups together or adding to a group to find how many in all. ● Subtraction means taking away from a group or breaking apart a number to find how many are left. ● We can use objects, drawings, and models to solve addition and subtraction word problems. ● Number pairs can be used to show all the different ways to make 10. ● Writing an equation or number sentence helps us explain how we added or subtracted to solve a problem. ● We can draw pictures, act it out, or make a model to help us solve math problems. ● Modeling helps us understand what is happening in a problem and show our thinking. ● Different strategies can help us make sense of addition and subtraction problems. ● Using counting strategies helps us compare sets and solve real-world math problems.

● How can you count and write up to 10 with words and numbers? ● How can you use a drawing to make 10 from a given number? ● How can you count forward to 10 from a given number?	
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 ● K.CC.A.1 Choral Counting ● K.CC.A.2 Start-Stop Counting ● K.CC.A.3 Assessing Writing Numbers ● K.OA.A.2 Dice Addition 2 ● K.OA.A.2 What's Missing? ● K.CC.B.5 Finding Equal Groups ● K.CC.C.6 Which number is greater? Which number is less? How do you know?	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments

● K.CC.C.7 Guess the Marbles in the Bag ● K.OA.A.5 Many Ways to Do Addition 1	
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 GENERAL MODIFICATIONS:	**At Risk (Intervention)** ● Maximize use of community resources

● 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	● 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: Kindergarten	**Course: Math**
Pacing: 8 weeks	
Unit: 3: Building Numbers and Operations to Twenty	**Big Idea:** **Chapter 13: Count, Represent and Compare Numbers Through 15** **Chapter 14: Count, Represent and Compare Numbers Through 20** **Chapter 15: Explore Addition and Subtraction to 20 Chapter 16: Count to 100**

Content Area NJSLS Performance Expectations Addressed	*Interdisciplinary Connections*
● K.CC.A.1 Count to 100 by ones and by tens. ● K.DL.A.1 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10) ● K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g. by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). ● K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. ● K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). ● K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, *e.g. by using objects or drawings*, and record each composition or decomposition by a drawing or equation *(e.g. 18 = 10 + 8);* understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	**English Language Arts** ● L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. ● RI.CI.K.2. With prompting and support, identify the main topic and key details of an informational text (e.g., who, what, where, when, why, how). ● SL.AS.K.6. Speak audibly and express thoughts, feelings, and ideas clearly. **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.

● K.OA.A.5 Demonstrate accuracy and efficiency for addition and subtraction within 5. **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.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.ITH.3: Identify how technology impacts or improves life.	**21st Century Skills** ● 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). ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive). **Technology** ● 9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2). **Career Readiness, Life Literacies, and Key Skills** **Practices:** ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Use technology to enhance productivity, increase collaboration and communicate effectively.
Student Learning Objectives (SLO)	

Students will be able to…

- count orally by ones up to 70.
- count orally by tens up to 70.
- identify measurable attributes.
- describe the measurable attributes of multiple objects.
- describe multiple measurable attributes of a single object.
- directly compare and describe two objects with measurable attribute in common using *more of* or *less of*.
- sort objects into groups.
- sort the group by count.
- decompose numbers less than or equal to ten into two numbers.
- record the decomposition with a drawing.
- record the decomposition with an equation.
- decompose the same number in more than one way.
- find a missing part of 10 using objects.
- given a number from 1 to 9, use drawings, or equations to find the number that makes 10.
- compose and decompose numbers from 11 to 19 into a group of ten *ones* and another group of one(s).
- use the term *ones* to describe the number of objects in each group.
- record each composition or decomposition using objects and drawings.
- record each composition or decomposition by a drawing or equation.
- add and subtract within 5 with accuracy and efficiency.

Academic Vocabulary

Count, Number names, Measurable, More, Less, Two-dimensional, Three-dimensional, Decompose

Essential Questions	***Enduring Understandings***
● How can you use objects to show 11 and 12 as tens and ones and some more ones? ● How can you count and write 11 and 12 with words and numbers? ● How can you use objects to show 13 and ● How can you use objects to show 13 and 14 as tens and ones and some more ones?	● Numbers from 11 to 19 are made of one group of ten and some more ones. ● We can use objects, pictures, or tools like ten-frames and cubes to model numbers as tens and ones.

● How can you count and write 13 and 14 with words and numbers? ● How can you use objects to show 15 as tens and some more ones and show 15 as a number? ● How can you solve problems using the strategy draw a picture? ● How can you use objects to show 16 and 17 as tens and ones and some more ones? ● How can you count and write 16 and 17 with words and numbers? ● How can you use objects to show 18 and 19 as tens and ones and some more ones? ● How can you count and write 18 and 19 with words and numbers? ● How can you show and count 20 objects? ● How can you count and write up to 20 with words and numbers? ● How can you count forward to 20 from a given number? ● How can you solve problems using the strategy make a model? ● How does the order of numbers help you to count to 50 by ones? ● How does the order of numbers help you to count to 100 by ones? ● How can you count to 100 by tens on a hundred chart? ● How can you use sets of tens to count to 10	● Writing numbers with words and numerals helps us show our understanding of quantity. ● Numbers can be shown in different ways but still represent the same amount. ● The order of numbers helps us count accurately and recognize patterns in the number system. ● Counting forward from any number helps us understand number sequences and prepares us to solve math problems. ● We can count by ones to 100 and by tens to 100 using patterns and tools like number charts or base ten blocks. ● Using groups of ten helps us count larger numbers more efficiently. ● Drawing a picture can help us understand and solve math problems by showing what's happening. ● Making a model with objects helps us solve problems and show our thinking in a concrete way.
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 tckets ● 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 ● K.CC.A.1 Assessing Counting Sequences Part 1 ● K.M.A.1 Which is heavier? ● K.M.A.2 Which is Longer? ● K.DL.A.1 Sort and Count 2 ● K.OA.A.3 Shake and Spill ● K.OA.A.3 Pick Two ● K.NBT.A.1 What Makes a Teen Number ● K.OA.A.5 My Book of Five	
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: Kindergarten	**Course: Math**
Pacing: 8 weeks	
Unit: 4: Shapes, Solids, Measurement and Money	**Big Idea:** **Chapter 17: Two-Dimensional Shapes** **Chapter 18: Three-Dimensional Solids** **Chapter 19: Measurement** **Introduction to Money**
Content Area NJSLS Performance Expectations Addressed	***Interdisciplinary Connections***
● K.G.A.2 Correctly name shapes regardless of their orientations or overall size. ● K.G.A.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). ● K.M.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. ● K.M.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the differences. *For example, directly compare the heights of two children and describe one child as taller/shorter.* ● K.CC.A.1 Count to 100 by ones and by tens. ● K.OA.A.5 Demonstrate accuracy and efficiency for addition and subtraction within 5. ● K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). ● K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	**English Language Arts** ● L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. ● RI.CI.K.2. With prompting and support, identify the main topic and key details of an informational text (e.g., who, what, where, when, why, how). ● SL.AS.K.6. Speak audibly and express thoughts, feelings, and ideas clearly. **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.

● K.G.B.6 Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"* ● K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, *e.g. by using objects or drawings*, and record each composition or decomposition by a drawing or equation *(e.g. 18 = 10 + 8);* understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. ● K.M.B.3 Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill. ● correctly name and identify the value of a penny, nickel, dime, quarter, and one-dollar bill. **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.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.ITH.3: Identify how technology impacts or improves life.	**21st Century Skills** ● 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). ● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a). ● 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). ● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive). **Technology**

	● 9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2). **Career Readiness, Life Literacies, and Key Skills Practices:** ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Use technology to enhance productivity, increase collaboration and communicate effectively.

Student Learning Objectives (SLO)

Students will be able to…

- count orally by ones up to 100.
- count orally by tens up to 100.
- add and subtract within 5 with accuracy and efficiency.
- identify measurable attributes.
- describe the measurable attributes of multiple objects.
- describe multiple measurable attributes of a single object.
- correctly name shapes regardless of their orientation or overall size.
- identify shapes as two-dimensional (lying in a plane, *flat*) or three-dimensional (*not flat, solid*).
- compare two- and three- dimensional shapes, in different sizes, and orientations.
- compare two- and three- dimensional shapes in different sizes and in different orientations and identify similarities and differences. ● compare parts of two- and three-dimensional shapes [e.g. number of sides, number of vertices (*corners*)].
- compare attributes of two- and three-dimensional shapes [e.g. sides have equal length.]
- use informal language to describe similarities, differences, parts, and other attributes when comparing two-and three-dimensional shapes, in different sizes and orientations.
- recognize basic shapes in the real world.
- use objects (clay, sticks, etc) to model shapes.
- model shapes in the world by drawing shapes.
- compose simple shapes to form larger shapes.
- compose and decompose numbers from 11 to 19 into a group of ten *ones* and another group of one(s).
- use the term *ones* to describe the number of objects in each group.

- record each composition or decomposition using objects and drawings.
- record each composition or decomposition by a drawing or equation.

Academic Vocabulary

Count, Number names, Two-dimensional, Three-dimensional, Shape names, Compose, Decompose, Ones

Essential Questions	***Enduring Understandings***
● How can you identify and name circles? ● How can you describe circles? ● How can you identify and name squares? ● ● How can you describe squares? ● How can you identify and name triangles? ● ● How can you describe triangles? ● How can you identify and name rectangles? ● How can you describe rectangles? ● How can you identify and name hexagons? ● How can you describe hexagons? ● How can you use the words alike and different to compare two-dimensional shapes? ● How can you solve problems using the strategy draw a picture? ● How can you show which shapes stack, roll, or slide? ● How can you identify, name, and describe spheres? ● How can you identify, name, and describe cubes? ● How can you identify, name, and describe cylinders? ● How can you identify, name, and describe cones? ● How can you solve problems using the strategy use logical reasoning? ● How can you model shapes in the real world? ● How can you use the terms above and below to describe shapes in the environment? ● How can you use the terms beside and next to to describe shapes in the environment? ● How can you use the terms in front of and behind to describe shapes in the environment?	● Shapes have names and defining attributes that help us identify and describe them. ● We can recognize and describe two-dimensional shapes by looking at their sides and corners. ● Shapes can be alike or different based on how they look or how many sides or corners they have. ● Drawing a picture helps us solve problems and better understand how shapes are used. ● Three-dimensional shapes have attributes like faces, edges, and corners that help us name and describe them. ● We can explore and describe how shapes move (roll, slide, or stack) based on their shape. ● Real-world objects can be modeled using solid shapes like spheres, cubes, cylinders, and cones. ● Words like above, below, beside, next to, in front of, and behind help us describe where shapes and objects are in space. ● Using logical reasoning helps us solve shape problems and understand how shapes work together. ● Objects can be measured and compared by attributes such as length, height, and weight. ● We can describe and compare how long, tall, or heavy things are using simple tools and words. ● Drawing a picture helps us solve problems about measurement and comparisons.

● How can you compare the lengths of two objects? ● How can you compare the heights of two objects? ● How can you solve problems using the strategy draw a picture? ● How can you compare the weights of two objects? ● How can you describe several ways to measure one object? ● How can you classify and count objects by color? ● How can you classify and count objects by shape? ● How can you classify and count objects by size? ● How can you make a graph to count objects that have been classified into categories? ● How can you read a graph to count objects that have been classified into categories? ● What is money, and what does it look like? ● How can you tell the difference between coins and dollar bills? ● How can you name and describe a penny, nickel, dime, quarter, and dollar bill? ● How do coins and dollar bills show how much something costs? ● How can you tell how much each coin and the dollar bill is worth?	● A single object can be measured in different ways using different units or tools. ● Objects can be sorted into groups by color, shape, or size. ● We can count and compare how many objects are in each group. ● Graphs help us organize and understand information about groups of objects. ● We can use graphs to answer questions and make comparisons. ● Money comes in different forms, like coins and dollar bills, and each has a special name and value. ● Coins and bills look different from each other in size, shape, color, and design, which helps us tell them apart. ● Each coin and bill has a name and a value that tells us how much it is worth. ● We use money to pay for things, and different items cost different amounts. ● Knowing the value of coins and bills helps us understand how much money we have and what we can buy.
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	**Formative** ● Oral assessment ● Exit tickets ● Quizzes **Summative** ● Tests ● Skills assessment/Benchmarks **Alternative** ● Centers/activities/games ● Performance assessments

● Prodigy ● Kahoot ● Quizizz ● Khan Academy ● iReady Learning Path and Lessons materials ● EnVision Math ● Teacher Created Materials ● K.CC.A.1 Counting by Tens ● K.G.B.4 Alike or Different Game ● K.NBT.A.1 What Makes a Teen Number	
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 GENERAL MODIFICATIONS:	**At Risk (Intervention)** ● Maximize use of community resources

● 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	● 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