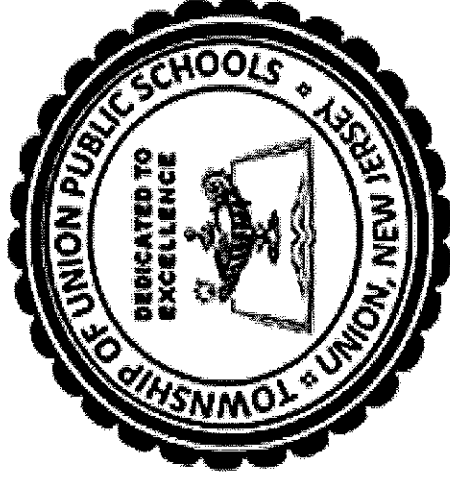


TOWNSHIP OF UNION PUBLIC SCHOOLS



Grade K/ Mathematics

Updated June 18, 2019

Mission Statement

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

Philosophy Statement

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Course Description

This guide has been created to assist district Kindergarten teachers in meeting the goals required to master the standards outlined in the Curricular Framework for Mathematics. The framework is aligned to the New Jersey Student Learning Standards for Mathematics and reflect the skills and knowledge students need to succeed in college, career, and life.

Curriculum Units/Pacing Guide

Unit # / Title	Number of Days
Unit 1: Connecting Counting to Cardinality	45
Unit 2: Counting, Addition & Subtraction	45
Unit 3: Place Value	45
Unit 4: Measurement, Data & Geometric Shapes	45

Unit Standards Overview

Overview	Standards	Unit Skills Focus	Content-Specific Practices (when applicable)
<p>Unit 1 Title: Connecting Counting to Cardinality</p>	<p>K.CC.A.1* K.CC.A.3* K.CC.B.4 K.CC.B.5* K.OA.A.1* K.MD.B.3* K.G.A.1</p>	<ul style="list-style-type: none"> • Know number names and the count sequence to 10 • Count to tell the number of objects • Understand addition as putting together and adding to and understand subtraction as taking apart and taking from • Identify and describe shapes 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p>
<p>Suggested Resources <i>Provide links to specific resources/activities</i></p>	<p>Go Math Chapter 1 Go Math Chapter 2 Go Math Chapter 3 Go Math Chapter 4 <u>K.CC.A.1 Counting Circles</u> <u>K.CC.A.1 Choral Counting</u> <u>K.CC.A.3 Number TIC TAC TOE</u> <u>K.CC.B.4 Counting Mat</u> <u>K.CC.B.5 Finding Equal Groups</u> <u>K.OA.A.1 Ten Frame Addition</u> <u>K.MD.B.3 Sort and Count 1</u></p>		<p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>
<p>Unit 2 Title: Counting, Addition & Subtraction</p>	<p>K.CC.A.1* K.CC.A.2 K.CC.A.3* K.OA.A.1* K.OA.A.2 K.CC.B.5* K.CC.C.6 K.CC.C.7 K.OA.A.5*</p>	<ul style="list-style-type: none"> • Know number names and the count sequence to 50 • Understand addition as putting together and adding to understand subtraction as taking apart and taking from • Count to tell the number of objects 	

<p>Suggested Resources Provide links to specific resources/activities</p>	<p>Go Math Chapter 5 Go Math Chapter 6 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? K.CC.C.7 Guess the Marbles in the Bag K.OA.A.5 Many Ways to Do Addition 1</p>	<ul style="list-style-type: none"> • Compare numbers 	
<p>Unit 3 Title: Place Value</p>	<p>K.CC.A.1* K.CC.A.1* K.OA.A.3 K.OA.A.4 K.NBT.A.1* K.OA.A.5*</p>	<ul style="list-style-type: none"> • Know number names and the count sequence to 100 • Understand addition as putting together and adding to understand subtraction as taking apart and taking from • Work with numbers 11-19 to gain foundations for place value • Fluently add and subtract within 5 	
<p>Suggested Resources Provide links to specific resources/activities</p>	<p>Go Math Chapter 7 Go Math Chapter 8 K.CC.A.1 Assessing Counting Sequences Part 1 K.CC.A.1 Counting by Tens K.MD.B.3 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</p>	<ul style="list-style-type: none"> • Describe and compare measurable attributes • Classify and count the number of objects in categories 	
<p>Unit 4 Title: Measurement, Data & Geometric Shapes</p>	<p>K.MD.A.1 K.MD.A.2 K.MD.B.3* K.G.A.2 K.G.A.3</p>	<ul style="list-style-type: none"> • Describe and compare measurable attributes • Classify and count the number of objects in categories 	

	<ul style="list-style-type: none"> • Identify and describe shapes • Analyze, compare, create, and compose shapes • Work with numbers 11–19 to gain foundations for place value • Fluently add and subtract within 5 	
<p>K.G.B.4 K.G.B.5 K.G.B.6 K.NBT.A.1*</p>		<p>Go Math Chapter 9 Go Math Chapter 10 Go Math Chapter 11 Go Math Chapter 12 K.G.B.4 Alike or Different Game K.MD.A.1 Which is heavier? K.MD.A.2 Which is Longer?</p>
<p>Suggested Resources Provide links to specific resources/activities</p>		

Curricular Units

Unit 1 Kindergarten

Content Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
<ul style="list-style-type: none"> K.CC.A.1. Count to 100 by ones and by tens. *(benchmark) 	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Number names and the count sequence up to 10 <p>Students are able to:</p> <ul style="list-style-type: none"> Count orally by ones <u>up to 10</u>. <p>Learning Goal 1: Count by ones <u>up to 10</u>.</p>
<ul style="list-style-type: none"> 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). *(benchmark) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Represent the number of objects with a numeral. <p>Students are able to:</p> <ul style="list-style-type: none"> Write numbers from <u>0 to 10</u>. <p>Learning Goal 2: Represent the number of objects with a written numeral <u>up to 10</u>.</p>
<ul style="list-style-type: none"> K.CC.B.4. Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.B.4a. 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. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Objects can be counted in any order. Each object is counted once (one-to-one correspondence). The next number name in counting is always one greater than the previous number. The last number name said tells the number of objects counted. <p>Students are able to:</p> <ul style="list-style-type: none"> 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.

<p>K.CC.B.4b. 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.</p> <p>K.CC.B.4c. Understand that each successive number name refers to a quantity that is one larger.</p>		<ul style="list-style-type: none"> Count objects arranged in any order. Identify the last number named as the number of objects counted. <p>Learning Goal 3: Assign an ascending number name for each object in a group.</p> <p>Learning Goal 4: State the last number named as the number of counted objects in the set.</p> <p>Learning Goal 5: Identify the next number name in counting as one greater than the previous number.</p>
<ul style="list-style-type: none"> 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. *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced</p> <p>Students are able to:</p> <ul style="list-style-type: none"> Count 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 <i>how many?</i> questions. Given a number from 1-10, count out that many objects. <p>Learning Goal 6: Answer <i>how many?</i> questions about groups of <u>up to 10</u> objects when arranged in a line, rectangular array or circle.</p> <p>Learning Goal 7: Answer <i>how many?</i> questions about groups of <u>up to 5</u> when arranged in a scattered configuration.</p>
<ul style="list-style-type: none"> 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. *(benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Understand addition as putting together and adding to. Understand subtraction as taking apart and taking from. <p>Students are able to:</p> <ul style="list-style-type: none"> create addition events with objects (up to 10). create addition events with drawings and sounds (up to 10). create addition events by acting out situations and with verbal explanations. <p>Learning Goal 8: Create addition events with objects, fingers, drawings, sounds (e.g., claps), acting out situations and verbal explanations for sums <u>up to 10</u>.</p>
	<p>MP.2 Reason abstractly and</p>	<p>Concept(s):</p>

<ul style="list-style-type: none"> ● K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count*(benchmark) 	<p>quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> ● Objects can be sorted based on their properties. Students will be able to: <ul style="list-style-type: none"> ● sort objects into categories <p>Learning Goal 9: Classify objects into given categories and count the objects in each category (up to 10 objects)</p>
<ul style="list-style-type: none"> ● 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. 	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Shapes have names. ● Positional words (above, below, besides, in front of, behind, next to) <p>Students will be able to:</p> <ul style="list-style-type: none"> ● Name shapes in order to describe objects in the environment. ● Use terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i> in order to describe relative positions of objects. <p>Learning Goal 10: 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, behind, and next to.</p>

<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
Go Math - Show What You Know Go Math - Diagnostic Interview Task Go Math - Lesson Quick Check Go Math - Mid Chapter Checkpoint	Go Math - Chapter Review/Test Go Math - Chapter Test Go Math - Performance Assessment Task

Focus Mathematical Concepts			
	Chapter 1	Chapter 2	Chapter 3
Prerequisite skills	<ul style="list-style-type: none"> Explore numbers to 5 Match numbers to sets up to 5 	<ul style="list-style-type: none"> One to One correspondence model numbers 0 to 5 write numbers 0 to 5 	<ul style="list-style-type: none"> Explore numbers to 5 Compare numbers to 5 Write numbers to 5
Common Misconceptions	<ul style="list-style-type: none"> children do not connect the number name/symbol to a model children have difficulty tracing/writing numerals children count in succession but do not assign number names to objects children have difficulty with sequential order 	<ul style="list-style-type: none"> children may not identify the words <i>greater than, less than or same</i> children may not identify the sets that are <i>greater than, less than or the same as</i> children may not identify the number that is <i>greater than or less than</i> 	<ul style="list-style-type: none"> children may not know number words children may have difficulty matching number to set children may have difficulty counting on a ten frame children may skip items or count items more than once
Number Fluency	Add/Subtract within 5	Add/Subtract within 5	Add/Subtract within 5

District/School Tasks	District/School Primary and Supplementary Resources
Exploring Number s and Matching Sets Center Activities: <ul style="list-style-type: none"> http://kindertribe.blogspot.com/2015/07/what-worked-well-wednesday-july-29th_29.html 	Go Math - Chapter Resources <ul style="list-style-type: none"> Reteach

- http://fun-a-day.com/summer-math-preschool-ice-cream-theme/?utm_content=buffer64c86&utm_medium=social&utm_source=pinterest.com&utm_campaign=buffer
- http://www.allkidsnetwork.com/crafts/numbers/octopus-counting-craft.asp?utm_source=EmailDirect.com&utm_medium=Email&utm_campaign=Newsletter Creative1 Send 2-15-14+Campaign
- https://www.etsy.com/listing/278166474/apple-seed-counting-pdf-pattern-felt?utm_source=OpenGraph&utm_medium=PageTools&utm_campaign=Share
- <https://www.teacherspayteachers.com/Product/OWL-Numbers-FREE-1413729>

Writing Numbers Center Activities:

- <http://www.theprintableprincess.com/2015/08/developing-fine-motor-skills.html?m=1>
- <http://primarygraffiti.blogspot.com/2013/01/freebie-number-formation-practice.html>
- http://www.fantasticfunandlearning.com/play-dough-writing-tray.html?utm_content=buffer7f487&utm_medium=social&utm_source=pinterest.com&utm_campaign=buffer

Greater/ Less Than/ Same As Center Activities:

- <http://justaskjudyteachingresources.blogspot.com/2016/05/how-to-teach-concepts-of-more-and-less.html>
- <http://www.applesandabc.com/2012/01/ice-cube-tray-math.html>
- <http://kfundamentals.blogspot.com/2013/04/more-less-and-equal.html>

Instructional Best Practices and Exemplars

- Go Math - Grab-and-Go Differentiated Centers Kit
- Go Math - Professional Development videos
- K-6 Math Literature List - <http://everydaymath.uchicago.edu/teachers/k/literature-list/>
- Math and Literature Idea Bank - <http://mathcats.org/ideabank/mathandliterature.html>
- Math Resources - <http://www.hubbardscupboard.org/math-resources>
- Math literature, links and resources for students, parents and teachers - <http://letsreadmath.com/math-and-childrens-literature/>
- Kindergarten math activities aligned with the Common Core State Standards - <http://www.k-5mathteachingresources.com/kindergarten-math-activities.html>
- Resources & activities for replacing worksheets with real, meaningful situations - <http://www.kindergarten-lessons.com/Educational-Computer-Games-and-Apps-for-kids> - www.abcya.com

- Enrich
- Go Math - Digital Personal Math Trainer
- Go Math - Math On the Spot
- Go Math - iTools
- Go Math - HMH Mega Math
- iReady - Math

Unit 1 Suggested Modifications/Accommodations/Extension Activities

English Language Learners (ELL)
When possible, provide links to specific samples/documents/ assignments/etc.

Special Education / 504
When possible, provide links to specific samples/documents/ assignments/etc.

Gifted and Talented
When possible, provide links to specific samples/documents/ assignments/etc.

<p>Examples of Strategies and Practices that Support English Language Learners:</p> <p>*All WIDA Can Do Descriptors can be found at: https://wida.wisc.edu/teach/can-do/descriptors</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding • Word walls • Sentence frames • Think-pair-share • Cooperative learning groups • Teacher think-aloud 	<p>Examples of Strategies and Practices that Support Students with Disabilities:</p> <p>*Refer to students' IEP for specific modifications and accommodations</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments 	<p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios
---	---	---

Unit 1 Connections	
<p>NJSLS - Technology</p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Technology Standards</u></p>	<p>Career Readiness Practices</p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Career Readiness Practices</u></p>
<p>Technology Standards: Technology standards are embedded throughout all curricular units.</p> <p>8.1 Educational Technology All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming</p> <p>All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p>	<p>Career Ready Practices:</p> <ul style="list-style-type: none"> • CRP1: Act as a responsible and contributing citizen and employee. • CRP2: Apply appropriate academic and technical skills. • CRP3: Attend to personal health and financial well-being. • CRP4: Communicate clearly and effectively and with reason. • CRP5: Consider the environmental, social and economic impacts of decisions. • CRP6: Demonstrate creativity and innovation. • CRP7: Employ valid and reliable research strategies. • CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. • CRP9: Model integrity, ethical leadership and effective management. • CRP10: Plan education and career paths aligned to personal goals.

<ul style="list-style-type: none"> ● CRP11: Use technology to enhance productivity. ● CRP12: Work productively in teams while using global competence. 	<p style="text-align: center;">Interdisciplinary Connections</p> <p><i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Student Learning Standards</u></p>
<p style="text-align: center;">21st Century Skills</p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>21st Century Life and Skills</u></p>	<p>Interdisciplinary connections are made across grades and content areas to model the integration of knowledge and skills in the real world.</p>
<p>21st Century Themes</p> <ul style="list-style-type: none"> ● Global Awareness ● Environmental Literacy ● Health Literacy ● Civic Literacy ● Financial, Economic, Business, and Entrepreneurial Literacy <p>21st Century Skills</p> <ul style="list-style-type: none"> ● Creativity and Innovation (E) ● Critical Thinking and Problem Solving (T) (A) ● Communication (E) ● Collaboration (E) (T) 	

Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
<ul style="list-style-type: none"> ● <u>K.CC.A.1.</u> Count to 100 by ones and by tens. *(benchmarked) 	MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> ● Number names and the count sequence up to 50 Students are able to: <ul style="list-style-type: none"> ● Count orally by ones <u>up to 50</u>. ● Count orally by tens <u>up to 50</u>. Learning Goal 1: Count to <u>50</u> by ones and by tens.
<ul style="list-style-type: none"> ● <u>K.CC.A.2.</u> Count forward beginning from a given number within the known sequence (instead of having to begin at 1). 	MP.7 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students will be able to: <ul style="list-style-type: none"> ● Count orally by ones <u>up to 50</u>, beginning at any number. Learning Goal 2: <ul style="list-style-type: none"> ● Count forward <u>up to 50</u> starting from numbers other than one.
<ul style="list-style-type: none"> ● <u>K.CC.A.3.</u> 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). *(benchmarked) 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure.	Concept(s): <ul style="list-style-type: none"> ● The number of objects can be represented by a numeral. Students are able to: <ul style="list-style-type: none"> ● Write numbers from <u>0 to 20</u>. Learning Goal 3: Represent a number of objects with a written numeral <u>0 to 20</u> .
<ul style="list-style-type: none"> ● <u>K.OA.A.1.</u> 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. *(benchmarked) 	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.	Concept(s): <ul style="list-style-type: none"> ● Understand addition as putting together and adding to. ● Understand subtraction as taking apart and taking from. Students are able to: <ul style="list-style-type: none"> ● 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. Learning Goal 4: Create addition and subtraction events with objects, fingers, drawings, sounds (e.g., claps), acting out situations and verbal explanations (<u>up to 10</u>).
<ul style="list-style-type: none"> ● <u>K.OA.A.2.</u> Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. 	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	Concept(s): No new concept(s) introduced Students will be able to: <ul style="list-style-type: none"> ● Use objects and drawings to represent addition and subtraction. ● Add and subtract within 10. Learning Goal 5: Use objects or drawings to represent and solve addition and

<ul style="list-style-type: none"> ● 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. *(benchmark) 	<p>strategically.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>subtraction word problems (within 10).</p> <p>Concept(s): No new concept(s) introduced Students are able to:</p> <ul style="list-style-type: none"> ● 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 object. <p>Learning Goal 6: Answer <i>how many?</i> Questions about groups of <u>up to 20</u> objects when arranged in a line, rectangular array or circle.</p> <p>Learning Goal 7: Answer <i>how many?</i> Questions about groups of <u>up to 10</u> when arranged in a scattered configuration.</p>
<ul style="list-style-type: none"> ● 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 <i>matching and counting strategies</i>. 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Different groups can have different numbers of objects. ● Numbers of objects can be compared using phrases such as <i>greater than, less than and equal to</i>. <p>Students will be able to:</p> <ul style="list-style-type: none"> ● 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. <p>Learning Goal 8: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (groups of up to 10 objects).</p>
<ul style="list-style-type: none"> ● K.CC.C.7. Compare two numbers between 1 and 10 presented as written numerals. 	<p>MP.2 Reason abstractly and quantitatively.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Number names and the count sequence ● The next number name in counting is always one greater than the previous number. ● Count to tell the number of objects. <p>Students will be able to:</p> <ul style="list-style-type: none"> ● Compare numbers (up to 10) written as numerals. <p>Learning Goal 9: Compare numbers (up to 10) written as numerals.</p>
<ul style="list-style-type: none"> ● K.OA.A.5. Demonstrate fluency for addition and subtraction within 5. (by the end of Kindergarten). *(benchmark) 	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): No new concept(s) introduced Students will be able to:</p> <ul style="list-style-type: none"> ● Add within 5 with accuracy and efficiency. <p>Learning Goal 10: Use mental math strategies to solve addition facts within 5.</p>

Unit 2 Assessment Plan	
Formative Assessment <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	Summative Assessment <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
<p>Go Math - Show What You Know</p> <p>Go Math - Diagnostic Interview Task</p> <p>Go Math - Lesson Quick Check</p> <p>Go Math - Mid Chapter Checkpoint</p>	<p>Go Math - Chapter Review/Test</p> <p>Go Math - Chapter Test</p> <p>Go Math - Performance Assessment Task</p>
Focus Mathematical Concepts	
Chapter 5	Chapter 6
<p>Prerequisite skills</p> <ul style="list-style-type: none"> • children understand <i>More</i> • children can compare numbers to 10 	<ul style="list-style-type: none"> • children understand Less • children can compare numbers to 10
<p>Common Misconceptions</p> <ul style="list-style-type: none"> • children miscount on a ten frame, counting rows instead of colors • children write incorrect numbers for the sets • children add incorrectly • children add the given addend and the sum • children write one of the addends as the sum • children may not understand that different numbers pairs can be used for the same sum 	<ul style="list-style-type: none"> • children do not understand the difference between the plus symbol and the minus symbol • children do not understand how many in all or to begin • children may add instead of subtract • children confuse the set being taken away with the set that remains • children may have difficulty showing subtraction with objects • children may have difficulty with an unknown starting number
Number Fluency	Add/Subtract within 5
District/School Tasks	
<p>Addition/ Subtraction Center Activities:</p> <ul style="list-style-type: none"> • https://www.pinterest.com/pin/39054721746141027/ • https://www.pinterest.com/pin/115264071687708036/ • https://www.pinterest.com/pin/235313149256895525/ • https://www.pinterest.com/pin/205758276704746246/ • https://www.pinterest.com/pin/283445370276967305/ 	
District/School Primary and Supplementary Resources	
<p>Go Math - Chapter Resources</p> <ul style="list-style-type: none"> • Reteach • Enrich <p>Go Math - Digital Personal Math Trainer</p> <p>Go Math - Math On the Spot</p> <p>Go Math - iTools</p> <p>Go Math - HMH Mega Math</p>	

iReady - Math	<ul style="list-style-type: none"> • https://www.pinterest.com/pin/317996423669565124/ • https://www.pinterest.com/pin/523895369124495875/ • https://www.pinterest.com/pin/24840235421277190/
Instructional Best Practices and Exemplars	
<p>Go Math - Grab-and-Go Differentiated Centers Kit Go Math - Professional Development videos Math Blaster Addition and Subtraction Worksheets - http://www.mathblaster.com/ Math Resources - http://www.hubbardscupboard.org/math-resources Kindergarten math activities aligned with the Common Core State Standards - http://www.k-5mathteachingresources.com/kindergarten-math-activities.html Resources & activities for replacing worksheets with real, meaningful situations - http://www.kindergarten-lessons.com/ Educational Computer Games and Apps for kids - www.abcyva.com</p>	

Unit 2 Suggested Modifications/Accommodations/Extension Activities		
<p>English Language Learners (ELL) <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>	<p>Special Education / 504 <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>	<p>Gifted and Talented <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>
<p>Examples of Strategies and Practices that Support English Language Learners: *All WIDA Can Do Descriptors can be found at: https://wida.wisc.edu/teach/can-do/descriptors</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills <p>with students who have more advanced English language skills</p> <ul style="list-style-type: none"> • Scaffolding • Word walls • Sentence frames • Think-pair-share • Cooperative learning groups • Teacher think-aloud 	<p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios 	<p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios

Unit 2: Connections

NJSLS - Technology

When possible, provide links to specific samples/ documents/ assignments/etc.
Refer to the NJ Technology Standards

Career Readiness Practices

When possible, provide links to specific samples/ documents/ assignments/etc.
Refer to the NJ Career Readiness Practices

Technology Standards: Technology standards are embedded throughout all curricular units.

8.1 Educational Technology All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.

8.2 Technology Education, Engineering, Design and Computational Thinking - Programming

All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.

Career Ready Practices:

- CRP1: Act as a responsible and contributing citizen and employee.
- CRP2: Apply appropriate academic and technical skills.
- CRP3: Attend to personal health and financial well-being.
- CRP4: Communicate clearly and effectively and with reason.
- CRP5: Consider the environmental, social and economic impacts of decisions.
- CRP6: Demonstrate creativity and innovation.
- CRP7: Employ valid and reliable research strategies.
- CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9: Model integrity, ethical leadership and effective management.
- CRP10: Plan education and career paths aligned to personal goals.
- CRP11: Use technology to enhance productivity.
- CRP12: Work productively in teams while using global competence.

21st Century Skills

When possible, provide links to specific samples/ documents/ assignments/etc.
Refer to the 21st Century Life and Skills

Interdisciplinary Connections

When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.
Refer to the NJ Student Learning Standards

21st Century Themes

- Global Awareness
- Environmental Literacy
- Health Literacy
- Civic Literacy
- Financial, Economic, Business, and Entrepreneurial Literacy

21st Century Skills

- Creativity and Innovation (E)
- Critical Thinking and Problem Solving (T) (A)
- Communication (E)
- Collaboration (E) (T)

Interdisciplinary connections are made across grades and content areas to model the integration of knowledge and skills in the real world.

Unit 3 Kindergarten

Unit 3 Kindergarten		
Content & Practice Standards		Critical Knowledge & Skills
<ul style="list-style-type: none"> K.CC.A.1. Count to 100 by ones and by tens. *(benchmark) 	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Number names and the count sequence up to 100 <p>Students are able to:</p> <ul style="list-style-type: none"> Count orally by ones <u>up to 100.</u> Count orally by tens <u>up to 100.</u> <p>Learning Goal 1: Count to <u>100</u> by ones and by tens.</p>
<ul style="list-style-type: none"> K.OA.A.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g. using objects or drawings, and record each decomposition by a drawing or equation (e.g. $5 = 3 + 2$ and $5 = 4 + 1$) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Part-to-whole relationships Some groups of objects can be broken into two smaller groups while the total number remains the same. Some groups of objects can be broken into two smaller groups in more than one way. <p>Students will be able to:</p> <ul style="list-style-type: none"> 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. <p>Learning Goal 7: Decompose numbers less than or equal to ten into pairs of numbers in more than one way and record with a drawing or equation.</p>
<ul style="list-style-type: none"> 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 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> No new concept(s) introduced

<p>the answer with a drawing or equation.</p>	<p>MP.4 Model with mathematics. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Students are able to:</p> <ul style="list-style-type: none"> 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. <p>Learning Goal 8: Given a number less than 10, find the number that makes 10.</p>
<ul style="list-style-type: none"> 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.* (benchmark) 	<p>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.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Numbers from 11 to 19 can be represented as one group of ten ones and another group containing fewer than ten ones. <p>Students are able to:</p> <ul style="list-style-type: none"> 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. <p>Learning Goal 9: Compose and decompose numbers from 11 to 19 into a group of ten and one(s) with or without manipulatives; record each composition or decomposition through a drawing or equation.</p>
<ul style="list-style-type: none"> K.OA.A.5. Demonstrate fluency for addition and subtraction within 5 (by the end of Kindergarten).* (benchmark) 	<p>MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> No new concept(s) introduced <p>Students will be able to:</p>

	<ul style="list-style-type: none"> Add and subtract within 5 with accuracy and efficiency. <p>Learning Goal 10: Use mental math strategies to solve addition and subtraction facts within 5.</p>
--	---

Unit 3 Assessment Plan	
Formative Assessment <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	Summative Assessment <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
Go Math - Show What You Know Go Math - Diagnostic Interview Task Go Math - Lesson Quick Check Go Math - Mid Chapter Checkpoint	Go Math - Chapter Review/Test Go Math - Chapter Test Go Math - Performance Assessment Task

Focus Mathematical Concepts	
Chapter 7	Chapter 8
Prerequisite skills <ul style="list-style-type: none"> students draw objects to 10 students write numbers to 10 	<ul style="list-style-type: none"> students explore numbers to 10 students compare numbers to 10 students write numbers to 10
Common Misconceptions <ul style="list-style-type: none"> students may not be able to count past 10 students may not recognize a two-digit number as a whole, but refer to both digits students may focus more on drawing than matching one-to-one students may write the total as one of the addends students may not draw the correct number of counters students may reverse the order of the digits 	<ul style="list-style-type: none"> students may not recognize that 2 filled ten frames are 20 students may have trouble counting forward from a given number students may not be able to recognize the greater number students may not be able to follow the order of the numbers on the chart students may not count all of the numbers as they use the chart to count students may count incorrectly when counting by tens students may start counting by tens and then count only one more instead of ten more
Number Fluency	Add/Subtract within 5

District/School Tasks

Identifying Numbers 11-20 Centers Activities:

- <https://www.pinterest.com/pin/146437425354270338/>

Counting sets to 20 Centers Activities:

- <https://www.pinterest.com/pin/173247916891785693/>
- <https://www.pinterest.com/pin/222717144044282559/>

Counting to 100 Centers Activities:

- https://www.pinterest.com/pin/AdxgbDdUGn_Vl4glNID7OXqYGU_9BILM_eXeGb8Hjys05jNcYoMH-NkQ/
- <https://www.pinterest.com/pin/552957660479645920/>
- https://www.pinterest.com/pin/ASwggQQZy5hrbNuSfcRjursMtl3yec8HF_0MEFLqz9F8lL8G00fMnw_1/

District/School Primary and Supplementary Resources

Go Math - Chapter Resources

- Reteach
 - Enrich
- Go Math - Digital Personal Math Trainer
 Go Math - Math On the Spot
 Go Math - ITools
 Go Math - HMH Mega Math
 iReady - Math

Instructional Best Practices and Exemplars

- Go Math - Grab-and-Go Differentiated Centers Kit
- Go Math - Professional Development videos
- Identifying numbers 11-20— <http://www.education.com/resources/identifying-numbers-11-20/>
- Counting to 100 Songs – https://www.pinterest.com/pin/AeScsAswhfBsQlh_Xk36gjhIWmhSAi0LRFbNVRRB1pZuJAQf7iz1JDY/
- Math Resources - <http://www.hubbarcupboard.org/math-resources>
- Kindergarten math activities aligned with the Common Core State Standards - <http://www.k-5mathteachingresources.com/kindergarten-math-activities.html>
- Resources & activities for replacing worksheets with real, meaningful situations - <http://www.kindergarten-lessons.com/>
- Educational Computer Games and Apps for kids - www.abcy.com

<p>English Language Learners (ELL) <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>	<p>Special Education / 504 <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>	<p>Gifted and Talented <i>When possible, provide links to specific samples/documents/ assignments/etc.</i></p>
<p>Examples of Strategies and Practices that Support English Language Learners: *All WIDA Can Do Descriptors can be found at: https://wida.wisc.edu/teach/can-do/descriptors</p> <ul style="list-style-type: none"> • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills <p>with students who have more advanced English language skills</p> <ul style="list-style-type: none"> • Scaffolding • Word walls • Sentence frames • Think-pair-share • Cooperative learning groups • Teacher think-aloud 	<p>Examples of Strategies and Practices that Support Students with Disabilities: *Refer to students' IEP for specific modifications and accommodations</p> <ul style="list-style-type: none"> • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments 	<p>Examples of Strategies and Practices that Support Gifted & Talented Students:</p> <ul style="list-style-type: none"> • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios

<p>Unit 3 Connections</p>		
<p>NJSLS - Technology <i>When possible, provide links to specific samples/documents/ assignments/etc.</i> Refer to the NJ Technology Standards</p>	<p>Career Readiness Practices <i>When possible, provide links to specific samples/documents/ assignments/etc.</i> Refer to the NJ Career Readiness Practices</p>	<p>Career Ready Practices:</p> <ul style="list-style-type: none"> • CRP1: Act as a responsible and contributing citizen and employee. • CRP2: Apply appropriate academic and technical skills. • CRP3: Attend to personal health and financial well-being. • CRP4: Communicate clearly and effectively and with reason. • CRP5: Consider the environmental, social and economic impacts of decisions. • CRP6: Demonstrate creativity and innovation. • CRP7: Employ valid and reliable research strategies. • CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. • CRP9: Model integrity, ethical leadership and effective management. • CRP10: Plan education and career paths aligned to personal goals. • CRP11: Use technology to enhance productivity. • CRP12: Work productively in teams while using global competence.
<p>Technology Standards: Technology standards are embedded throughout all curricular units. 8.1 Educational Technology All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge. 8.2 Technology Education, Engineering, Design and Computational Thinking - Programming All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p>		

<p>Interdisciplinary Connections <i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Student Learning Standards</u></p>	<p>21st Century Skills <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>21st Century Life and Skills</u></p>
<p>Interdisciplinary connections are made across grades and content areas to model the integration of knowledge and skills in the real world.</p>	<p>21st Century Themes</p> <ul style="list-style-type: none"> ● Global Awareness ● Environmental Literacy ● Health Literacy ● Civic Literacy ● Financial, Economic, Business, and Entrepreneurial Literacy <p>21st Century Skills</p> <ul style="list-style-type: none"> ● Creativity and Innovation (E) ● Critical Thinking and Problem Solving (T) (A) ● Communication (E) ● Collaboration (E) (T)

Unit 4 Kindergarten

Content & Practice Standards

Critical Knowledge & Skills

<ul style="list-style-type: none"> ● K.MD.A.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Measurable attributes: length, weight, size (volume) ● A single object can have more than one measurable attribute. Students are able to: <ul style="list-style-type: none"> ● Identify measurable attributes. ● Describe the measurable attributes of multiple objects. ● Describe multiple measurable attributes of a single object. <p>Learning Goal 2: Describe measurable attributes of multiple objects and describe several measurable attributes of a single object.</p>
<ul style="list-style-type: none"> ● K.MD.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. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i> 	<p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● When comparing objects by measuring, each object must have the same starting point. ● Moving an object does not change its measure. Students are able to: <ul style="list-style-type: none"> ● Directly compare and describe two objects with measurable attribute in common using <i>more of</i> or <i>less of</i>. <p>Learning Goal 3: Directly compare two objects with a measurable attribute in common; use <i>more of</i> or <i>less of</i> to compare the objects.</p>
<ul style="list-style-type: none"> ● K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. *(benchmark) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Groups can be sorted by the number of objects in each group. Students are able to: <ul style="list-style-type: none"> ● Sort objects into groups. ● Sort the group by count. <p>Learning Goal 4: Count the objects in given categories and sort the categories by count (up to 10 objects).</p>
<ul style="list-style-type: none"> ● K.G.A.2. Correctly name shapes regardless of their orientation or overall size. 	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Shapes have names.

<ul style="list-style-type: none"> ● K.G.A.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”) 		<ul style="list-style-type: none"> ● Shapes can have the same names but appear different. Students are able to: ● Correctly names shapes regardless of their orientation or overall size. <p>Learning Goal 5: Correctly names shapes regardless of their orientation or overall size.</p>
<ul style="list-style-type: none"> ● 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 (<i>e.g. number of sides and vertices “corners”</i>) and other attributes (<i>e.g. having sides of equal length</i>). 	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Shapes may be <i>flat</i> or <i>solid</i>. ● Identify shapes as two-dimensional (lying in a plane, <i>flat</i>) or three-dimensional (<i>not flat, solid</i>). ● Compare two- and three- dimensional shapes, in different sizes, and orientations. <p>Learning Goal 6: Identify shapes as two-dimensional (lying in a plane, <i>flat</i>) or three-dimensional (<i>not flat, solid</i>).</p>
	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Orientation does not alter attributes or size. ● Shapes may have sides of unequal or equal length. ● Shapes may or may not have the same number of sides or ‘corners’. <p>Students are able to:</p> <ul style="list-style-type: none"> ● 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 (<i>corners</i>)]. ● 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. <p>Learning Goal 3: Use informal language to describe similarities, differences, parts number of sides, number of <i>corners</i>), and other attributes (<i>having sides of equal length</i>) when comparing two- and three- dimensional shapes, in different sizes and orientations.</p>

<ul style="list-style-type: none"> ● K.G.B.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Basic shapes exist in real world objects. Students are able to: ● Recognize basic shapes in the real world. ● Use objects (clay, sticks, etc) to model shapes. ● Model shapes in the world by drawing shapes. <p>Learning Goal 4: Model shapes in the world by building and drawing shapes.</p>
<ul style="list-style-type: none"> ● 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?" 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Shapes can be combined to make larger shapes. Students are able to: ● Compose simple shapes to form larger shapes. <p>Learning Goal 5: Compose simple shapes to form larger shapes.</p>
<ul style="list-style-type: none"> ● 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.* (benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Numbers from 11 to 19 can be represented as one group of ten ones and another group containing fewer than ten ones. Students are able to: ● 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. <p>Learning Goal 6: Compose and decompose numbers from 11 to 19 into a group of ten and one(s) with or without manipulatives. Record each composition or decomposition through a drawing or equation.</p>

Unit 4 Assessment Plan	
<p>Formative Assessment</p> <p>When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p>Summative Assessment</p> <p>When possible, provide links to specific samples/ documents/ assignments/etc.</p>

Go Math - Show What You Know
 Go Math - Diagnostic Interview Task
 Go Math - Lesson Quick Check
 Go Math - Mid Chapter Checkpoint

Go Math - Chapter Review/Test
 Go Math - Chapter Test
 Go Math - Performance Assessment Task

Focus Mathematical Concepts

	Chapter 9	Chapter 10	Chapter 11	Chapter 12
Prerequisite skills	<ul style="list-style-type: none"> Identify shape Count objects 	<ul style="list-style-type: none"> Identify shapes Describe shapes Sort shapes 	<ul style="list-style-type: none"> More and fewer Compare numbers 	<ul style="list-style-type: none"> Color and shape Compare sets
Common Misconceptions	<ul style="list-style-type: none"> students may have difficulty identifying circles, triangles, squares, rectangles, and/or hexagons students may not recognize everyday 	<ul style="list-style-type: none"> students may have difficulty identifying that a cylinder can stack students may confuse 	<ul style="list-style-type: none"> Students may not understand the terms <i>longer</i> and <i>shorter</i> Students 	<ul style="list-style-type: none"> students may have difficulty sorting and classifying shapes by color students may have difficulty

Number Fluency Add/Subtract within 5 Add/Subtract within 5 Add/Subtract within 5

District/School Primary and Supplementary Resources

Shapes and Solids Centers Activities:

- <https://www.pinterest.com/pin/21251429470078194/>
- <https://www.pinterest.com/pin/125749014575688151/>
- <https://www.pinterest.com/pin/801851908624352457/>

Measurement Centers Activities:

- <https://www.pinterest.com/pin/159385274291854172/>

Go Math - Chapter Resources

- Reteach
- Enrich

Go Math - Digital Personal Math Trainer

Go Math - Math On the Spot

Go Math - iTools

Go Math - HMH Mega Math

iReady - Math

- https://www.pinterest.com/pin/AaHc1KWggWJ9M5XgAksESb1hYmV2YVJ_MGHeSSGICQDqCmZvC4I4I3c/
- <https://www.pinterest.com/pin/53761789276625471/>
 - <http://inspirationlaboratories.com/ideas-to-practice-classification-for-kids/>

Sorting And Classifying Centers Activities:

Instructional Best Practices and Exemplars

- Go Math - Grab-and-Go Differentiated Centers Kit
 Go Math - Professional Development videos
 Flat Shapes Song-- <https://www.youtube.com/watch?v=qepEhdI7418>
 Solid shapes Song-- <https://www.pinterest.com/pin/573153490061632582/>
 Solid shapes Song-- <https://www.youtube.com/watch?v=9PqZbOYakJk&feature=youtu.be>
 Math Resources - <http://www.hubbardscupboard.org/math-resources>
 Kindergarten math activities aligned with the Common Core State Standards - <http://www.k-5mathteachingresources.com/kindergarten-math-activities.html>
 Resources & activities for replacing worksheets with real, meaningful situations - <http://www.kindergarten-lessons.com/>
 Educational Computer Games and Apps for kids - www.abcya.com

Unit 4 Suggested Modifications/Accommodations/Extension Activities

English Language Learners (ELL)
When possible, provide links to specific samples/documents/ assignments/etc.

Examples of Strategies and Practices that Support English Language Learners:

- **All WIDA Can Do Descriptors can be found at:**
<https://wida.wisc.edu/teach/can-do/descriptors>
- Pre-teaching of vocabulary and concepts
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Teacher modeling
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding
- Word walls
- Sentence frames
- Think-pair-share
- Cooperative learning groups

Special Education / 504
When possible, provide links to specific samples/documents/ assignments/etc.

Examples of Strategies and Practices that Support Students with Disabilities:

- ***Refer to students' IEP for specific modifications and accommodations**
- Use of visual and multisensory formats
- Use of assisted technology
- Use of prompts
- Modification of content and student products
- Testing accommodations
- Authentic assessments

Gifted and Talented
When possible, provide links to specific samples/documents/ assignments/etc.

Examples of Strategies and Practices that Support Gifted & Talented Students:

- Adjusting the pace of lessons
- Curriculum compacting
- Inquiry-based instruction
- Independent study
- Higher-order thinking skills
- Interest-based content
- Student-driven instruction
- Real-world problems and scenarios

•Teacher think-aloud

Unit 4 Connections	
<p>NJSLS - Technology <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Technology Standards</u></p> <p>Technology Standards: Technology standards are embedded throughout all curricular units. 8.1 Educational Technology All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge. 8.2 Technology Education, Engineering, Design and Computational Thinking - Programming All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p>	<p>Career Readiness Practices <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Career Readiness Practices</u></p> <p>Career Ready Practices:</p> <ul style="list-style-type: none">● CRP1: Act as a responsible and contributing citizen and employee.● CRP2: Apply appropriate academic and technical skills.● CRP3: Attend to personal health and financial well-being.● CRP4: Communicate clearly and effectively and with reason.● CRP5: Consider the environmental, social and economic impacts of decisions.● CRP6: Demonstrate creativity and innovation.● CRP7: Employ valid and reliable research strategies.● CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.● CRP9: Model integrity, ethical leadership and effective management.● CRP10: Plan education and career paths aligned to personal goals.● CRP11: Use technology to enhance productivity.● CRP12: Work productively in teams while using global competence.
<p>21st Century Skills <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>21st Century Life and Skills</u></p>	<p>Interdisciplinary Connections <i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Student Learning Standards</u></p>
<p>21st Century Themes</p> <ul style="list-style-type: none">● Global Awareness● Environmental Literacy● Health Literacy● Civic Literacy● Financial, Economic, Business, and Entrepreneurial Literacy	<p>Interdisciplinary connections are made across grades and content areas to model the integration of knowledge and skills in the real world.</p>

21st Century Skills

- Creativity and Innovation (E)
- Critical Thinking and Problem Solving (T) (A)
- Communication (E)
- Collaboration (E) (T)