

Glen Ridge Board of Education
Kindergarten Math
Required
Full Year

New Jersey Student Learning Standards

Written by: Erin Goldstein

2022

Math Mission Statement: It is the mission of the Glen Ridge Math Department to engage and challenge all students through the learning of mathematics. It is in this learning that students will have the opportunity to develop sound reasoning and problem solving skills, which will in turn provide the perseverance and critical thinking necessary to compete in a global society.

Course Description: The kindergarten math program emphasizes the use of concrete materials to develop the understanding of mathematical concepts. The children are actively involved with a wide variety of materials to explore patterning, sorting and classifying, graphing, counting, measurement, geometry, addition and subtraction, place value and problem solving.



Name of Course
Unit 1:
Time Allotted (days of instruction): 4 weeks approximately
New Jersey Student Learning Standards (NJSLS) :
<ul style="list-style-type: none">● Participate in daily mathematical routines ((K.CC.1,2,3 K.CC.4a,b, K.CC.5,K.CC.6,,7K.MD.3,K.OA.2,)● Explore measurement by comparing lengths (K.MD.1, K.DM.2)● Identify and describe shapes (K.G.2, K.G.3, K.G.4)<ul style="list-style-type: none">○ a. Use informal language to describe shapes○ b. Explore shapes in different orientations○ c. Combine simple shapes to form other shapes and pictures○ d. Describe the relative position of shapes○ e. Verbally count objects in a set of 5○ f. Recognize numbers out of sequence in a set of 5○ g. Use a five frame to compare numbers in various ways○ h. Count objects in each sorted category● Recognize that numbers have many different uses (K.CC.3)● Explore the number 0 and 1 (K.CC.3,K.CC.4a,c,K.CC.5)<ul style="list-style-type: none">● a. Recognize and understand 0 as a number for “none”● b. Represent numbers with concrete objects● Develop oral counting skills by learning how to “count on” (K.CC.1,2)● Count, compare and represent data (K.MD.3, K.CC4.a, K.CC.4b, K.CC.4c, K.CC.5,6,7)<ul style="list-style-type: none">* a. Make a class bar graph* b. Use understanding of one-to-one correspondence and cardinality to count and create sets of object* c. Represent numbers in various ways* d. Compare the number of objects in each category* e. Recognize that the number of objects in a set is the same regardless of the arrangement or type of object● Compose and decompose numbers and explore addition by looking at dots in different arrangements (K.OA.3)<ul style="list-style-type: none">* a. Create and extend patterns (K.G.2)

Interdisciplinary Standards

- Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems
- Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
- Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.
- Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How do we establish daily mathematical routines? ● How do we tell which object is longer/shorter? (comparing lengths) ● How do we count a set of objects to 5? (one-to-one correspondence) ● What are Pattern Blocks and how are they used? ● How do we sort objects? ● What are attributes? ● How do we recognize numbers in our world? ● How do we collect data? ● How do we recognize and describe shapes? 	<p>Upon completion of this unit, students will be able to:</p> <ul style="list-style-type: none"> ● Compare lengths ● Use shape names ● Use one-to one correspondence and the cardinal principle as they count ● Recognize numbers and shapes in the word around them ● Use oral counting skills ● Count, compare, and represent data on a simple chart ● Create concrete and paper graphs to show simple data, such as ages, and use them to answer counting a comparison questions ● Represent the number 5 in multiple ways ● Use 5-frames to informally explore addition and subtraction within 5 ● Describe, compare, & contrast a variety of shapes ● Identify and describe shapes in the context of repeating and growing patterns 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds: <ul style="list-style-type: none"> ○ The Quilt By: Ann Jones ○ 2. Selina and the Bear Paw Quilt By: Barbara Smucker ○ 3. Changes, Changes By: Pat Hutchins ○ 4. City by Numbers By: Stephen T Johnson ○ 5. Emily’s First 100 Days of School By: Rosemary Wells ○ 6. When I was Five By: Arthur Howard ○ 7. Five Little Chicks By: Nancy Tafuri ○ 8. Five Little Firefighters By: Margret Wise Brown ○ 9. Five Little Monkeys By: Eileen Christelow ○ 10. Seven Blind Mice By: Ed Young ○ Shape books ○ Nine Ducks Nine by Sarah Hayes

		<ul style="list-style-type: none"> ○ Pattern Fish by Trudy Harris ● Songs <ul style="list-style-type: none"> ○ Everyday Math Sing Everyday Song Collection ○ Dr. Jean Totally Math songs ○ Raffi–Five Green and Speckled Frogs ● Lesson Games/Activities <ul style="list-style-type: none"> ○ Partner Match (Lesson 1-1) ○ Explore/create pictures with pattern blocks (Lesson 1-2) ○ Play Gotcha: A Counting Game to practice one-to-one correspondence (Lesson 1-3) ○ Play Simon Says, using numbers to give instructions: example: Simon says “Jump three times.” (Lesson 1-3) ○ Take a Number Walk (Lesson 1-4) ○ Write numbers 0-9 (Lesson 1-5) ○ Represent numbers 0-9 (Lesson 1-5) ○ Play Count & Sit (Lesson 1-6) ○ Make a class birthday chart (Lesson 1-7) ○ Make a class age graph (Lesson 1-8) ○ Make number stations for the #5 (Lesson 1-9) ○ Play Quick Looks (Lesson 1-10) ○ Explore 5-frames (Lesson 1-11) ○ Explore pattern blocks to describe shapes (Lesson 1-12) ○ Make shape patterns (Lesson 1-13)
<p>Resources/Materials</p>	<ul style="list-style-type: none"> ● Unit 1 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● 5-frames 	

	<ul style="list-style-type: none"> ● red/yellow counters ● Quick Look cards ● Objects for number representations
Interdisciplinary Connections/Standards (NJSLS)	<ul style="list-style-type: none"> ● Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>
Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
Diversity/Inclusion	<p>Discuss contributions of African American women to mathematics:</p> <ul style="list-style-type: none"> ● Katherine Johnson, a female African American mathematician who was critical to the United States' success in putting astronaut John Glen into orbit in 1962. ● How Katherine Johnson Saved Apollo 13 by Hellaine Becker ● Video: <i>Katherine Johnson: The Girl Who Loved to Count</i> by NASA ● Kids LOVE video games! How did they come to be? Learn about Valerie Thomas—a scientist and inventor best known for inventing the Illusion Transmitter in 1980. This technology was the first of its kind in the field of 3D-imagery and is the basis for modern 3D-televisions, video games, and movies.  <ul style="list-style-type: none"> ● 

Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes–repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts–mnemonics, graphic organizers, color coding, cue cards, pictures 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand–that’s okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities

	<ul style="list-style-type: none"> ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)

Name of Course

Unit 2:

Time Allotted (days of instruction): 4 weeks approximately

New Jersey Student Learning Standards (NJSLS)

- Represent addition and subtraction with objects, mental images, drawings, sounds, acting out situations, verbal explanations, expressions or equations. (K.OA.1)
- Solve addition and subtraction word problems, and add and subtract within 10. (K.OA.2)
- Classify objects into given categories, count the number of objects in each category and sort the categories by count. (K.MD.3)
- Correctly name shapes (triangles, circles, rectangles, squares) regardless of their orientation or size. (K.G.2)
- Analyze and compare two and three dimensional shapes, in different sizes and orientations using informal language. (K.G.4)

Interdisciplinary Standards (njcccs.org)

- Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems
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Essential Questions



Student Learning Objectives

Activities

<ul style="list-style-type: none"> ● What happens when we combine groups and what happens when we take groups apart? ● What is addition? ● What is subtraction? ● How many sides does a triangle have? ● What are the different sides of a triangle called? ● What does a “one more” pattern look like? ● What are collection boxes and how do we 	<p>Upon completion of this unit students will be able to:</p> <ul style="list-style-type: none"> ● Reason about why different arrangements can represent the same number ● Discuss strategies for counting and compare sets of objects ● Compare and discuss a wide range of triangles ● Explain counting mistakes 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months
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<p>sort objects?</p> <ul style="list-style-type: none"> ● Do circles have straight or rounded lines? ● What is a tens frame? ● What is a scattered arrangement ● Are squares and rectangles the same? ● What is a number story? 	<ul style="list-style-type: none"> ● Discuss strategies for seeing the total number of dots and make connections between different representations ● Discuss strategies for solving “one more” problems ● Discuss what it means to “sort” ● Compare and discuss circles/non-circles ● Discuss strategies for counting scattered sets ● compare/discuss rectangles and non-rectangles ● Discuss strategies for solving number stories ● Discuss and compare representations of ten 	<p>of the Year, counting, seasons, etc.</p> <ul style="list-style-type: none"> ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds <ol style="list-style-type: none"> 1. Ten Black Dots By: Donald Crews 2. The Greedy Triangle By: Marilyn Burns 3. Rooster is off to See the World By: Eric Carle 4. A Pocket for Corduroy By: Don Freedman 5. Round is a Mooncake By: Roseanne Thong 6. Ten Little Fish By: Audrey Wood 7. Splash By; Ann Jonas 8. Circus Shapes By: Stuart J Murphy ● Songs <ul style="list-style-type: none"> ○ Morning Meeting Math Songs ○ Dr. Jean Totally Math cd songs ○ Everyday MathSing Everyday music cd ● Lesson Games/Activities <ul style="list-style-type: none"> ○ Play Match Up with Dot Cards (Lesson 2-1) ○ Play Top-It with Dot Cards (Lesson 2-2) ○ Play Counting Fingers (Lesson 2-3) ○ Build a Number Board–Quick Looks at Dot Patterns and Five Frames (Lesson 2-4) ○ Play Count and Sit/Solve Pocket problems (Lesson 2-5) ○ Play Match Up and Top-It with Dot Cards; Find “How Many Now?” (Lesson 2-6) ○ Review Daily Routines (Lesson 2-7) ○ Five-Frame practice (Lesson 2-8) ○ Exploring Ten Frames; Solving Pocket Problems (Lesson 2-9) ○ Counting Collections–one-to-one correspondence practice (Lesson 2-10) ○ Play How Many Now?; find real-life examples of rectangles (lesson 2-11) ○ Teloing and Acting Out Number Stories; Literacy and Music Connection (Lesson 2-12) ○ Exploring More Number Stories; Creating Number Stations for 10 (Lesson 2-13)
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Resources/Materials	<ul style="list-style-type: none"> ● Unit 2 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Dot Cards ● Two-Dimensional Shapes Poster ● Opaque container ● Sorting mats/collections for sorting ● Two-Dimensional Shapes poster ● 10-frames
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
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Diversity/Inclusion	<p>Read/Discuss:</p> <ul style="list-style-type: none"> ● <i>The Girl With A Mind For Math</i> by Julia Finley Mosca, Illustrated by Daniel Rieley: Meet Raye Montague—the hidden mastermind who made waves in the U.S. Navy ● <i>Hidden Figures</i> by Margot Lee Shetterly, Illustrated by Laura Freeman: Dorothy Vaughan, Mary Jackson, Katherine Johnson, and Christine Darden were good at math...<i>really</i> good. <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
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Assessments			
Formative	Summative	Benchmarks	Alternative
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Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts ● Use hands-on materials in place of written assignments 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand—that's okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards

<p>introduce new vocabulary and concepts</p> <ul style="list-style-type: none"> ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Display a model of the end product ● Give clear expectations of desired outcomes—repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts—mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course
Unit 3:
Time Allotted (days of instruction): 4 weeks approximately
<p>New Jersey Student Learning Standards (NJSLS)</p> <ul style="list-style-type: none"> ● Sort, graph, compare and count pattern blocks by shape (K.cc.5,5;K.MD.3) ● Use a tens frame to explore number pairs that add to 10 (K.CC.4b; K.OA.3,4) ● Practice writing numerals 1-10 (K.CC.3,5) 1. Match objects to dots to written numerals ((K.CC.3) ● Recognize numerals and represent number with objects (K.CC.4a, K.CC.4b, K.CC4.c) ● Compare and order numbers (K.CC.7) ● Compare lengths and arrange items by length (K.MD.1, K.MD.2) ● Understand the use of positional language ((K.G.1) ● Create matching representations for numbers between 5-10 (K.CC3, 4b, 5, 6) ● Practice numeral recognition, 1-1 correspondence and counting as they play a game (K.CC.3,4a) ● Use number cards to practice successive numbers, sequencing, number recognition and matching sets of numbers ((K.CC.2,3,4a-c,5) ● Match dice patterns to numerals (K.CC.3,4b,5,6) ● Play a game to practice number recognition and explore number relationships (greater than/less than) (K.CC.3,7) <p>Interdisciplinary Standards</p> <ul style="list-style-type: none"> ● Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment. ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and


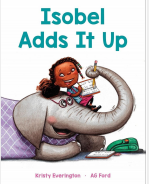
promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.

- **Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.**

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How can you compare and graph pattern blocks ● How do we write numbers to 10? ● How do we count numbers to 10? ● How can we compare numbers to 10? ● What does the last number in a counting sequence tell you? ● How can we compare different lengths? ● How to use positional words? (in front of, behind, up, down, etc...) 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Learn and play the game Roll and Record ● Practice number writing skills ● Become aware of equivalent names for numbers ● Discuss and analyze different representations of numbers ● Learn and play the game Monster Squeeze ● Discuss predictions/results about graphing activity ● Look at patterns to discuss results of graphing ● Reason about whether shapes are in the same family and why ● Represent numbers in different ways and compare representations ● Reason “longer” and “shorter” ● Describe positions relative to different people or objects ● Consider and explain the meaning of zero ● compare/contrast different number lines ● Reason about strategies for comparing lengths ● Create shapes with different materials ● Use greater/less than clues to play Monster Squeeze 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds <ul style="list-style-type: none"> ○ 1. Roll Over, A Counting Song by Merle Peek ○ 2. When A Line Bends....A Shape Begins by Rhonda Gowler Greene ○ 3. Circus Shapes by Stuart J Murphy ○ 4. Where’s my Teddy? by Jez Alborough ○ 5. Is a Blue Whale the Biggest Whale There Is? by Robert E. Wells ○ 6. The Three Billy Goats Gruff by Paul Galdone ○ 7. Rosie’s Walk By: Pat Hutchins ○ 8. Goldilocks and the Three Bears by Robert Southey ○ Pigs at Odds by Amy Axelrod ○ 9. Go Away Big Green Monster by Ed Emberley ● Activities/Games <ul style="list-style-type: none"> ○ Play Match Up with Dot and number Cards (Lesson 3-1) ○ Play Count and Sit (Lesson 3-2) ○ Solve Pocket Problems; Make shapes out of

		<p>other shapes (Lesson 3-3)</p> <ul style="list-style-type: none"> ○ Make representations of the numbers 2 & 3; count collections(Lesson 3-4) ○ Make representations of the numbers 4 & 5; compare objects as longer/shorter (Lesson 3-5) ○ Discuss meanings of positional words; use positional language in books; Play a positional word obstacle course, moving students around the room in accordance with positional words (Lesson 3-6) ○ Play Which Number Doesn't Belong (Lesson 3-7) ○ Play Spin a Number; Game and Art Connection; Discuss the number 0 (Lesson 3-8) ○ Practice number writing ○ Discuss the "successor function"; Make a Human Number Line; explore 10-Frames (Lesson 3-9) ○ Play Number-Card Games; find longer and shorter objects; identify "one-more" patterns in the count sequence and strategies for ordering numbers (Lesson 3-10) ○ Play Roll and Record (Lesson 3-11) ○ Play Monster Squeeze (Lesson 3-12) ○ Number writing practice; daily routine review (Lesson 3-13)
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<p>Resources/Materials</p>	<ul style="list-style-type: none"> ● Unit 3 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals
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	<ul style="list-style-type: none"> ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Decks with Dot Cards 0-10 and numbers 0-10 ● Various materials from Units 1 & 2 (see individual lessons) ● Walk-on game board ● Spin a Number spinners/game boards ● Monster Squeeze monsters
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>
Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
Diversity/Inclusion	<p>Read/Discuss:</p> <ul style="list-style-type: none"> ● The Astronaut with a Song for the Stars: The Story of Dr. Ellen Ochoa by Julia Finley Mosca and Daniel Rieley; Dr. Ochoa was many firsts, including being the first Hispanic woman in space; The Johnson Space Center’s first Hispanic director, and its second female director. ● Isobel Adds It Up by Kristy Everington–Isobel has math homework, but she doesn’t mind: solving problems is her thing! But the new next door neighbors are making so much racket it is hard for her to concentrate! How does she solve this problem, too? <div style="display: flex; justify-content: space-around; align-items: flex-end;">   </div>

Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes-repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts-mnemonics, graphic organizers, color coding, cue cards, pictures 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand-that's okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student "helper" and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities

	<ul style="list-style-type: none"> ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course
Unit 4:

Time Allotted): 4 weeks approximately

New Jersey Student Learning Standards (NJSLS)

- Sort and classify attribute blocks (K.CC.5,6; K.MD.1,3; K.G.2,4,5,6)
- Create and analyze a graph (K.cc.5,6; K.MD.3)
- Use a calculator to read and record numbers (K.CC.3,5)
- Compose and decompose numbers up to 10 on a tens frame (K.OA.3,4,5)
- Count and recognize teen numbers (K.CC.1,3)
- Build hexagons with other smaller shaped pattern blocks (K.G.1,2,6)
- Use connecting cubes to compose and decompose numbers in multiple ways (K.CC.1.3.6,7;K.G.1,2,6)
- Use a pan balance to compare the weight of different objects (K.MD.1,2)
- Understand capacity and compare capacities (K.MD.1,2) ● Learn to skip count by 10's (K.CC.1,2)
- Play games to practice comparing written numerals (K.CC.3,7)

Interdisciplinary Standards

- **Standard 8.1 – Computer and Information Literacy:** All students will use computer applications to gather and organize information and to solve problems
- **Standard 8.2 - Technology Education:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment.
- **Standard 6.3 - Active Citizenship in the 21st Century:** All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.
- **Standard 9.1 - 21st-Century Life and Career Skills:** All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

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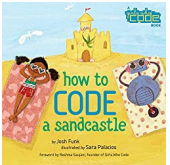

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● What are attribute blocks and do we use them? ● How can objects be represented and compared using geometric attributes? ● How can objects be classified? ● What is counting and how do we use it? ● How to use the sense of touch to describe shapes? 	<ul style="list-style-type: none"> ● Sort and classify attribute blocks ● Use data to create a simple graph ● Read numbers on a calculator ● Understand simple functions of a calculator ● Use a 10-frame to compose and decompose numbers ● Recognize teen numbers 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph

- How to analyze results from a graph?
- What is a Pan balance scale and how is it used?
- What is a calculator and how is it used?
- What are “teen numbers”?

- Count teen numbers
- Use various shapes to build hexagons
- Know the function of a balance pan
- Know basics of capacity
- Use games as a tool to compare written numbers
- Describe shapes by their attributes
- Use “between”, “higher than”, “lower than” to compare numbers

- Clap to count # Days in School
- Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc.
- Calendar Activities
- Smart Board/Promethean Board activities
- Read alouds
 - 1. Three Little Firefighters By: Stuart J Murphy
 - 2. Frog and Toad (The Button Story) By: Arnold Lobel
 - 3. Caps For Sale By: Esphyr Slobodkina
 - 4. Mojo Means One By: Muriel Feelings
 - 5. Meet the Teens By: Marcia Cooper
 - 6. We All Went on Safari By: Laurie Krebs
 - 7. The Apple Pie Tree By: Zoe Hall
 - 8. Cook-a-Doodle Do By: Susan Stevens Crummel
 - 9. One Hundred is a Family By: Pam Muñoz Ryan
 - 10. More or Less By: Stuart J Murphy
 - 11. How the Stars Fell in the Sky By: Jerrie Oughton
- Activities/Games
 - Sort attribute blocks by shape and size (Lesson 4-1)
 - Explore attribute blocks by touch, and describe shapes/compare shapes (Lesson 4-2)
 - Match shapes by feel (4-2)
 - Make a Favorite Color Graph, using horizontal bars (4-3)
 - Use a calculator to practice reading/recording numbers to represent objects (4-4)
 - Play Quick Looks to mentally compose and decompose numbers and relate quantities to 5 and 10 (4-5)
 - Build hexagons with smaller shapes (4-7)
 - Use connecting cubes to compose/decompose numbers (4-8)
 - Use a pan balance to compare weights (4-9)

		<ul style="list-style-type: none"> ○ Use various containers to explore capacity (4-10) ○ Group objects by 10; skip count by 10s (4-11) ○ Play Top-It with number cards (4-12) ○ Explore the number grid to use as a counting tool (4-13)
Resources/Materials	<ul style="list-style-type: none"> ● Unit 4 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Pan balance ● Capacity cups ● Number grid–100 grid ● Attribute blocks ● Top-It cards ● Quick Look cards 	
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture 	
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>	

Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
Diversity/Inclusion	<p>Read/Discuss:</p> <ul style="list-style-type: none"> ● How to Code a Sand Castle by Josh Funk–Introduction to the world of coding. ● The World Is Not a Rectangle: A Portrait of Architect Zaha Hadid–woman engineer <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand–that’s okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding

<ul style="list-style-type: none"> ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes—repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts—mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course
Unit 5:
Time Allotted (days of instruction): 4 weeks approximately
<p>New Jersey Student Learning Standards (NJSLS)</p> <ul style="list-style-type: none"> ● Read and write numbers from 0-20 and represent at least 10 objects with a numeral (K.CC.3) ● Solve simple number stories and problems involving addition and subtraction, using objects, drawing or other strategies. (KOA.2) ● To find the number that makes 10 when added to a given number, using a tens frame for support. (K.OA.4) ● To compose and decompose numbers from 11-19 into tens and ones and some more. (K.NBT.1) ● Use a double tens frame (K.NBT.1) ● Describe objects in the environment using names of 2 dimensional shapes (K.G.1) ● Understand and use the names for positional words (K.G.1) ● To model familiar shapes by drawing (K.G.1) <p>Interdisciplinary Standards</p> <ul style="list-style-type: none"> ● Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment. ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.

- **Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.**

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● What does 100 look like? ● Why are graphs helpful? ● How many combinations of 10 can be made? ● How many shapes can you find in pictures? ● How can you make a teen number? ● How to use a double tens frame? ● What do the = and + symbols mean? ● What are Number Scrolls and how are they related to math? ● How can shapes be combined to make new shapes? 	<ul style="list-style-type: none"> ● Read and write numbers from 0-20 and represent at least 10 objects with a numeral ● Solve simple number stories and problems involving addition and subtraction, using objects, drawing or other strategies ● Find the number that makes 10 when added to a given number, using a tens frame for support. ● Compose and decompose numbers from 11-19 into tens and ones and some more ● Use a double tens frame ● Describe objects in the environment using names of 2 dimensional shapes ● Understand and use the names for positional words ● Model familiar shapes by drawing 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds <ul style="list-style-type: none"> ○ 1. 100th Day Worries By: Margery Cuyler ○ 2. The 100th Day of School By: Angela Shelf Medearis ○ 3. The Night Before the 100th Day of School By: Natasha Wing ○ 4. Mouse Count By: Ellen Stoll Walsh ○ 5. Bunny Party By: Rosemary Wells ○ 6. Equal Shmequal By: Virginia Kroll ○ 7. Little Quack By: Lauren Thompson ○ 8. Shape by Shape By: Suse MacDonald ○ 9. Grandfather Tang's Story By: Ann Tompert ○ 10. Mouse Shapes By: Ellen Stoll Walsh ○ Equal Shmequal by Virginia Kroll ● Activities/Games <ul style="list-style-type: none"> ○ 100 Days of School Read Alouds ○ 100th Day of School Activities ○ Fill in a 100 number grid ○ Play Roll and Record with Dot Dice ○ Play 10 Bears on a Bus ○ Make Shape collages ○ Go on a Shape Walk around the school

		<ul style="list-style-type: none"> ○ Represent/recognize teen numbers as a group of 10 and “some more” ○ Make tens and ones/Activity Card 41 ○ Seats at a Party–Open Response–compare student representations ○ Teens on a Double Tens frame–Play Spin a Teen Number and use the double 10s frame to represent number ○ Create equal and unequal groups ○ Play Growing Train Game
Resources/Materials	<ul style="list-style-type: none"> ● Unit 5 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages 	
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture 	
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Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p>	

	<ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
Diversity/Inclusion	Resource: 12 Multicultural STEM Books for Kids This is a good resource for age-appropriate books.

Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes-repeat as needed ● Frequent check-ins 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand—that’s okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance

<ul style="list-style-type: none"> ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts–mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications–hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course

Unit 6:

Time Allotted: 4 weeks approximately

New Jersey Student Learning Standards (NJSLS)

- Read and write numbers from at least 0-20 and represent sets with numerals (K.CC.3)
- Represent addition and subtraction concretely and verbally (K.OA.1)
- Compare objects by length and by weight and describe the difference using terms such as lighter, heavier, shorter and longer (K.MD.2)
- Classify objects into given categories, count the number of objects in each category, and sort the categories by count (K.MD.3)
- Correctly name a variety of 2 dimensional shapes and some three dimensional shapes regardless of their orientation or overall size (K.G.2)
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Interdisciplinary Standards

- **Standard 8.1 – Computer and Information Literacy:** All students will use computer applications to gather and organize information and to solve problems
- **Standard 8.2 - Technology Education:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment.
- **Standard 6.3 - Active Citizenship in the 21st Century:** All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.
- **Standard 9.1 - 21st-Century Life and Career Skills:** All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How do you compare heights and lengths? ● How do you interpret a bar graph? ● How do you describe a 3 dimensional shape? ● How are shapes the same and different? 	<ul style="list-style-type: none"> ● Read and write numbers from at least 0-20 and represent sets with numerals ● Represent addition and subtraction concretely and verbally ● Compare objects by length and by 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule

<ul style="list-style-type: none"> ● How can you use attributes to sort objects? ● What is the - symbol and how is it used? ● How can a number be broken down into smaller numbers? ● How can the +, -, and = symbols be used in number stories 	<p>weight and describe the difference using terms such as lighter, heavier, shorter and longer</p> <ul style="list-style-type: none"> ● Classify objects into given categories, count the number of objects in each category, and sort the categories by count ● Correctly name a variety of 2 dimensional shapes and some three dimensional shapes regardless of their orientation or overall size 	<ul style="list-style-type: none"> ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds <ul style="list-style-type: none"> ○ 1. Tall By: Jez Alborough ○ 2. Pet Show By: ○ 3. Five Little Ducks By: Raffi ○ 4. I Love Trains By: Philemon Sturges ○ 5. This Train By: Paul Collicutt ○ 6. Blueberries for Sal By: Robert McCloskey ● Games/Activities <ul style="list-style-type: none"> ○ Collect data for students to make a Favorite Pet graph individually ○ Play I Spy with shapes ○ Compare the order of mixed assorted objects by length from shortest to longest ○ Observe and compare the difference between flat and solid shapes ○ Play “Guess My Shape” ○ Make 3-D shapes with modeling clay ○ Sort objects by attributes: color, size, shape ○ Open Response- Solve a measuring number story ○ Introduce subtraction symbol (-) as a way to show less ○ Practice “take away” number stories ○ Draw a take away number story ○ Play Disappearing Train Game ○ Play Attribute Spinner Game
<p>Resources/Materials</p>	<ul style="list-style-type: none"> ● Unit 6 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks 	

	<ul style="list-style-type: none"> ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Attribute spinners–prepared by teacher ● Dice ● Disappearing Train game boards ● Attribute activity cards 55-57
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>
Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment

Diversity/Inclusion	<p><i>Read/Discuss:</i></p> <ul style="list-style-type: none"> ● <i>Talkin' about Bessie: The Story of Aviator Elizabeth Coleman</i> by Nikki Grimes, Illustrated by E.B. Lewis: Soar along with Bessie Coleman in this inspirational tale of a woman whose determination reached new heights. ● <i>Mae Among the Stars</i> by Roda Ahmed, Illustrated by Stasia Burrington: A beautiful picture book for sharing, inspired by the life of the first African American woman to travel in space, Mae Jemison. <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
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Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand—that's okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding

<ul style="list-style-type: none"> ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes—repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts—mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course
Unit 7:
Time Allotted (days of instruction): 4 weeks approximately
New Jersey Student Learning Standards (NJSLS)
<ul style="list-style-type: none"> ● Count objects in an array of 20 or a scattered arrangement of 10 (K.CC.5) ● Use counting and matching strategies to identify whether the objects in one group are greater than, less than or equal to the number of objects in another group. (K.CC.6) ● Solve addition and subtraction word problems and be able to add and subtract within 10 (K.OA.2) ● Decompose numbers less than 10 or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition by a drawing or equation (K.OA.3) ● identify shapes as 2 dimensional or 3 dimensional (K.G.3) ● Compose simple shapes to form larger shapes (K.G.6)
Interdisciplinary Standards
<ul style="list-style-type: none"> ● Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment. ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and

promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.

- **Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.**

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How can a number line be used to help with addition and subtraction? ● How can I identify and count objects in a scattered and unscattered arrangement? ● How can I compare objects in two or more groups by using the terms greater than or less than? ● How can I solve addition and subtraction number stories within 10? ● How can I recognize and compare 2 dimensional and 3 dimensional shapes? ● How can I use a pan balance scale to compare weights? ● How can I use estimating skills to compare objects? ● How can data be collected and organized for display? ● Why do we break numbers apart into tens and ones? 	<ul style="list-style-type: none"> ● Count 20 objects in an array ● Count a scattered arrangement of 10 objects ● Compare the number of objects in one group to the number of objects in another group, using greater than, less than or equal to ● Solve simple addition and subtraction word problems ● Add and subtract within 10 ● Show different ways of representing the same number ● Identify shapes as 2 dimensional or 3 dimensional ● Use simple shapes to form larger shapes 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds: <ul style="list-style-type: none"> ○ 1. Dominoes Around the World by Mary D. Lankford ○ 2. Cubes, Cones, Cylinders and Spheres by Tanya Hobin ○ 3. Just a Little Bit by Ann Tompert ○ 4. The Best Vacation Ever by Stuart J. Murphy ○ 5. 12 Ways to Get 11 by Eve Merriam ○ 6. Animals on Board by Stuart J. Murphy ● Activities/Games <ul style="list-style-type: none"> ○ Play Frog Hops on the Number Line ○ Use Dominoes to find two parts and a total ○ Use dominoes to decompose a total number ○ Make number sentences using dominoes ○ Play Monster Squeeze with teen numbers ○ Use a double teen fram to count and compare teen collections ○ Play Top-It, using teen numbers ○ Make picture representations of teen numbers ○ Dance Macarena Math

		<ul style="list-style-type: none"> ○ Order a group of objects by weight, using a pan balance to compare objects ○ Make bead bracelets to decompose numbers; write a number sentence to describe your bead bracelet ○ Use 10 red/yellow counters, dumped from a cup, to find and record various ways to make the number 10 ○ Play Dice Addition Game
Resources/Materials	<ul style="list-style-type: none"> ● Unit 7 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages 	
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture 	
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>	

Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment
Diversity/Inclusion	<p>See below for link to information about these 14 Read Alouds that Celebrate Diversity in STEM:</p> <ol style="list-style-type: none"> 1. Big Rain Coming by Katrina Germein 2. Wild Berries by Julie Flett 3. Ruby’s Birds by Mya Thompson 4. Nya’s Long Walk by Linda Sue Park 5. Magic Trash by J.H. Shapiro 6. Sofia Valdez, Future Prez by Andrea Beaty 7. The Proudest Blue by Ibtihaj Muhammad and S.K. Ali 8. Peter’s Chair by Ezra Jack Keats 9. Patience, Miyuki by Roxane Marie Galliez 10. Jabari Tries by Gaia Cornwall 11. Invent a Pet by Vicky Fang 12. Galimoto by Karen Lynn Williams 13. Ada Twist, Scientist by Andrea Beaty 14. The Boy Who Harnessed the Wind by William Kamkwamba and Bryan Mealer <p>https://carlyandadam.com/thecarlyandadam/14-diverse-stem-picture-books-for-elementary-students</p>

Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects

<ul style="list-style-type: none"> ● KWL ● Morning Meeting observations ● Error analysis 			<ul style="list-style-type: none"> ● Math message small group instruction ● Open response
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Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes—repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts—mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand—that’s okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice Activities ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)

Name of Course

Unit 8:

Time Allotted (days of instruction): 4 weeks approximately

New Jersey Student Learning Standards (NJSLS)

- Use senses be to identify shapes (K.G.1,2,4)
- Count forward to 100 starting from numbers other than 1 (K.CC.1,2)
- Use counts be used to measure time (K.CC.1,2)
- Group and count objects by 10 (K.CC.3,5)
- Use patterns to find solutions (K.OA.1,2,3,4; K.G.2)
- Decompose the number 10 to find the missing part ($10 = 6 + \underline{\quad}$) (K.OA.3,4)
- Group/order numbers from least to greatest (K.CC.2,3,7)
- Gain fluency with addition facts? (K.CC.7, K.OA.1,2,5)
- Solve number stories with calculators (K.OA.2)



Interdisciplinary Standards

- **Standard 8.1 – Computer and Information Literacy:** All students will use computer applications to gather and organize information and to solve problems
- **Standard 8.2 - Technology Education:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment.
- **Standard 6.3 - Active Citizenship in the 21st Century:** All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world.
- **Standard 9.1 - 21st-Century Life and Career Skills:** All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How can your senses be used to identify shapes ● How to count forward to 100 starting from numbers other than 1? ● How can counts be used to measure time? ● How to group and count objects by 10? ● How can patterns be used to find solutions? ● How to decompose the number 10 to find the missing part? ($10 = 6 + \underline{\quad}$) ● How can numbers be grouped from least to greatest ● What are some ways to gain fluency with 	<ul style="list-style-type: none"> ● Compare 2-and 3-DI shapes in different sizes and orientations ● Count to 100 by ones and tens ● Count forward to 100 starting from numbers other than 1 ● Solve simple addition and subtraction problems to 10 ● Teen number recognition–Recognize numbers as combinations of 10s, and 1s ● Decomposing numbers to find a missing part of 10 ● Compose, decompose and understand numbers 11-19 as ten and some more 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities

<p>addition facts</p> <ul style="list-style-type: none"> • How to solve number stories with calculators 	<ul style="list-style-type: none"> • Compare numbers and place them in order from least to greatest • Use mental math strategies to add and subtract numbers • Explore equivalent names for numbers • Use calculators as a tool to solve simple number stories by forming addition and subtraction equations 	<ul style="list-style-type: none"> • Read Alouds <ul style="list-style-type: none"> ○ 1. Castle, Cathedral, Pyramid (3 separate books by David Macaulay) ○ 2. This is the Way we Go to School by Edith Baur ○ 3. My Grandfather’s Clock by Geraldine McCaughrean ○ 4. The Tortoise and the Hare ○ 5. What’s the Difference? An Endangered Animal Subtraction Story by Suzanne Slade ○ 6. More, Fewer and Less by Tana Hoban ○ 7. One is a Snail, Ten is a Crab by April Pulley Sayre • Activities/Games <ul style="list-style-type: none"> ○ Make 3-D shapes using toothpicks and clay ○ Read: My Grandfather’s Clock–Describe, measure, and mark the passage of time ○ Play Dice Subtraction ○ Make Craft Stick Bundles to represent numbers greater than 10 ○ Play I Spy a Shape ○ Play Monster Squeeze ○ Play Top-It ○ Practice Skip Counting by 5s, 10s ○ Find number pairs that add to 10–students work together and can use red/yellow counters in a cup, ten frames, any other 10 manipulatives of their choice; write number sentences to represent your findings ○ Play Addition Top-It ○ Play Domino Top-It ○ Play Function Machine ○ Play Birds on a Wire ○ Play Car Race ○ Work in pairs to make Number Collection Posters
<p>Resources/Materials</p>	<ul style="list-style-type: none"> • Unit 8 Math Masters • Everyday Math manipulatives • Read alouds (above) 	

	<ul style="list-style-type: none"> ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Everyday Math Game Boards: Bird on a Wire; Monster Squeeze, Car Race, etc. ● red/yellow counters ● Paper cups ● Dominoes ● Craft sticks ● Rubber bands ● Toothpicks ● Clay ● Large poster paper
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
21st Century Life and Careers	<p>Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture</p>
Technology Standards	<p>*Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment

Diversity/Inclusion	<p>Read/Discuss:</p> <ul style="list-style-type: none"> ● <i>The Doctor With An Eye For Eyes: The Story of Dr. Patricia Bath</i> by Julia Finley Mosca, Illustrated by Daniel Rieley: <i>If you like to think big, but some say you're too small, or they say you're too young or too slow or too tall...</i> Meet Dr. Bath—the scientist who never lost sight of her dreams! ● <i>Talkin' about Bessie: The Story of Aviator Elizabeth Coleman</i> by Nikki Grimes, Illustrated by E.B. Lewis: Soar along with Bessie Coleman in this inspirational tale of a woman whose determination reached new heights. <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
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Assessments			
Formative	Summative	Benchmarks	Alternative
<ul style="list-style-type: none"> ● Thumbs up/thumbs down ● Anecdotal notes ● Independent work ● Manipulatives ● White boards/sheet protectors ● Center activities ● Open-ended questions ● Verbal assessment ● Circle time discussions ● Math games ● 3,2,1,self assessments ● KWL ● Morning Meeting observations ● Error analysis 	<ul style="list-style-type: none"> ● Portfolio ● Manipulative demonstrations ● Rubrics ● verbal assessments ● Worksheets ● Problem solving: group/individual ● Quiz games ● Board games ● Crafts 	<ul style="list-style-type: none"> ● SGO items ● Beginning, middle, and end-of-year assessments ● MAP ● Report cards ● Unit assessments ● IXL ● Math Message ● Exit slips 	<ul style="list-style-type: none"> ● Games ● Art projects ● Math seeds ● Smartboard/Promethean Board lessons ● Calculators ● Website games ● Find a Mistake ● Open response ● Unit projects ● Math message small group instruction ● Open response

Modifications		
English Language Learners	Special Education/504	Gifted and Talented
<ul style="list-style-type: none"> ● Provide correction for language errors by modeling, not overt correction ● Verbal/hands-on testing for written assessments ● Use of graphic organizers; scaffolding ● Make lessons visual ● Use visual representations of new 	<ul style="list-style-type: none"> ● Provide one-on-one assistance ● Repeat directions ● Break down directions ● Limit materials to a manageable amount ● Partner activities ● Shorten assignments to focus on mastery of key concepts 	<ul style="list-style-type: none"> ● Ask higher-level thinking questions that others may not understand—that's okay! ● Open Response Questions that provide opportunity for students of various levels to give answers at their own level of thinking/understanding ● Readiness, Enrichment and Extra Practice

<p>vocabulary and use graphs, maps, photographs, drawings, and charts to introduce new vocabulary and concepts</p> <ul style="list-style-type: none"> ● Tell a story about information in the textbook using visuals ● Cooperative and partner activities ● Give students a job in a group; monitor that they are participating ● Highlight action words within the directions (verbal emphasis) ● Frequent check ins ● Repeat directions ● One-on-one assistance 	<ul style="list-style-type: none"> ● Use hands-on materials in place of written assignments ● Display a model of the end product ● Give clear expectations of desired outcomes—repeat as needed ● Frequent check-ins ● Provide manipulatives for addition/subtraction, etc ● Provide extended time ● Rephrase questions as needed for understanding ● Provide prompts—mnemonics, graphic organizers, color coding, cue cards, pictures ● Allow for various applications—hands-on activities, prompts, dramatization, illustrations, manipulatives ● Work with Special Ed teacher as needed 	<p>Activities</p> <ul style="list-style-type: none"> ● Activity Cards ● Enrichment folders ● Opportunities to be a student “helper” and explain instructions to other students who need assistance ● Math Seeds ● Everyday Math Online Games/EToolkit ● Everyday Math Partner Games ● Home Link Activities ● Extra Practice Activities ● Minute Math Activities ● Math Masters worksheets and activities ● Online web sites and games (i.e. scholastic, Math Seeds, Everyday Mathematics Program Math games)
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Name of Course
Unit 9:
Time Allotted (days of instruction): 4 weeks approximately
<p>New Jersey Student Learning Standards (NJSLS)</p> <ul style="list-style-type: none"> ● Recreate pattern block designs(K.G.1,2,6) ● Gain fluency with addition and subtraction to 5 (K.CC.7,K.OA.1,2,5) ● Describe measurable attributes of height and weight (K.CC.7, K.MD.1,2) ● Represent addition and subtraction concretely, verbally and symbolically (K.OA.1-5) ● Use a Pan balance scale to explore units of weight (K.CC.6,K.MD.1,2) ● Use tools to measure and compare lengths of time (K.CC.7,K.MD.1,2) ● Introduced to double numbers on a tens frame (K.OA.1,2,5) ● Find combinations that add to 10 (K.OA.1-4) <p>Interdisciplinary Standards</p> <ul style="list-style-type: none"> ● Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment. ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.

Essential Questions	Student Learning Objectives	Activities
<ul style="list-style-type: none"> ● How can patterns be recreated? ● How can we use addition and subtraction rules to help with fluency to 5? ● How can we use measurable attributes (length, width) to describe objects? ● How can we measure and compare weight? ● How can we use concrete, verbal and symbolic representations for addition and subtraction ? ● What tools can be used to measure time? 	<ul style="list-style-type: none"> ● Use attribute blocks to recreate pattern block designs ● Gain confidence and fluency with addition/subtraction to 5 ● Understand that height and weight are measurable attributes; use words to describe/compare ● Represent addition and subtraction concretely, verbally and symbolically ● Explore units of weight using a Pan balance ● Compare the weights of objects using a pan balance. ● Understand the lengths of time; use tools to measure and compare ● Understand that there are different combinations of numbers that make up 10 	<ul style="list-style-type: none"> ● Morning Meeting: Students will participate in hands on activities, including: <ul style="list-style-type: none"> ○ Days in School Number Line ○ Attendance Chart ○ Daily Schedule ○ Monthly Calendar ○ Weather/Temperature Chart ○ Question of the Day bar graph ○ Clap to count # Days in School ○ Songs to reinforce: Days of the Week, Months of the Year, counting, seasons, etc. ○ Calendar Activities ○ Smart Board/Promethean Board activities ● Read Alouds <ul style="list-style-type: none"> ○ Ten Little Fish by Audrey Wood ○ Ten Black Dots by Donald Crews ○ Ten Flashing Fireflies by Philomen Sturges ● Activities/Games <ul style="list-style-type: none"> ○ Play Subtraction Top-It ○ Play What’s My Rule? ○ Measure height, width; understand “area” ○ Play Roll and Record with numeral dice ○ Make a classroom map ○ Make a school map ○ Make “equal” on a pan balance ○ Measure time in seconds ○ Play Fishing for 10 ○ Play Doubles on a Doubles Ten Frame ○ Review concepts ○ End-of-Year Assessment
Resources/Materials	<ul style="list-style-type: none"> ● Unit 9 Math Masters ● Everyday Math manipulatives ● Read alouds (above) ● Smartboard/Promethean board; math journal ● Attribute blocks ● Morning meeting materials ● Music (above) ● Home Links 	

	<ul style="list-style-type: none"> ● Game Boards ● Math Manuals ● Handwriting Without Tears Number Writing Activities: individual chalkboards, chalk, sponges; workbook pages ● Double 10 frames ● Pan balance ● Objects to weigh ● End of year assessment
Interdisciplinary Connections	<p>Standard 8.1 – Computer and Information Literacy: All students will use computer applications to gather and organize information and to solve problems</p> <ul style="list-style-type: none"> ● Standard 8.2 - Technology Education: All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment ● Standard 6.3 - Active Citizenship in the 21st Century: All students will acquire the skills needed to be active, informed citizens who value diversity and promote cultural understanding by working collaboratively to address the challenges that are inherent in living in an interconnected world. ● Standard 9.1 - 21st-Century Life and Career Skills: All the students will demonstrate the creative, critical thinking, collaboration, and problem solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational culture
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Diversity/Inclusion	<p>Check out this link for a list of books that celebrate Asian contributions to Science and Math.</p> <p>Books that celebrate Asian contributions to Science and Math</p>

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